

Pallid Sturgeon Fish & Wildlife Proposal 1

Draft of July 22, 2005

Title of Option: PS/FWG 50/50 Proposal 1

1. Description of the Proposal:

- a. **Number of Rises:** 2
- b. **Flood Control Targets/constraints:** Must be adjustable. Constraints should be realised as necessary to prevent them from stopping the rise.
- c. **Timing, duration, magnitude, rise and fall rates of First Rise:** This bi-modal spring rise is represented by the 50%tile of the 100 years of discharge record at Gavins Point Dam. Proposed TOTAL magnitude for the first rise is ~64 Kcfs.. Timing needs to occur before initiation of spawning window (e.g.16 degrees) and should occur on the rising limb of the thermograph. Beginning date should be about March 14 (Julian day 74), peaking (2 days) on March 30 (Julian day 90), with a rise of 16 days. The descending limb would fall over 20 days for a total duration for first pulse of 38 days. For the first pulse, magnitude is more important than duration. First pulse will condition spawning habitat.

Start of rise	March 14 (Julian date 74)
Peak of rise	March 30 (Julian date 90)
End date	April 21 (Julian date 111)
Relative rising peak (Kcfs)	40.7 (~63.5Kcfs total peak)
Total pulse duration	38 days

- d. **Timing, duration, magnitude of Flow Between Rises:** Dependent on model output and the specifications of c. above and e. below.

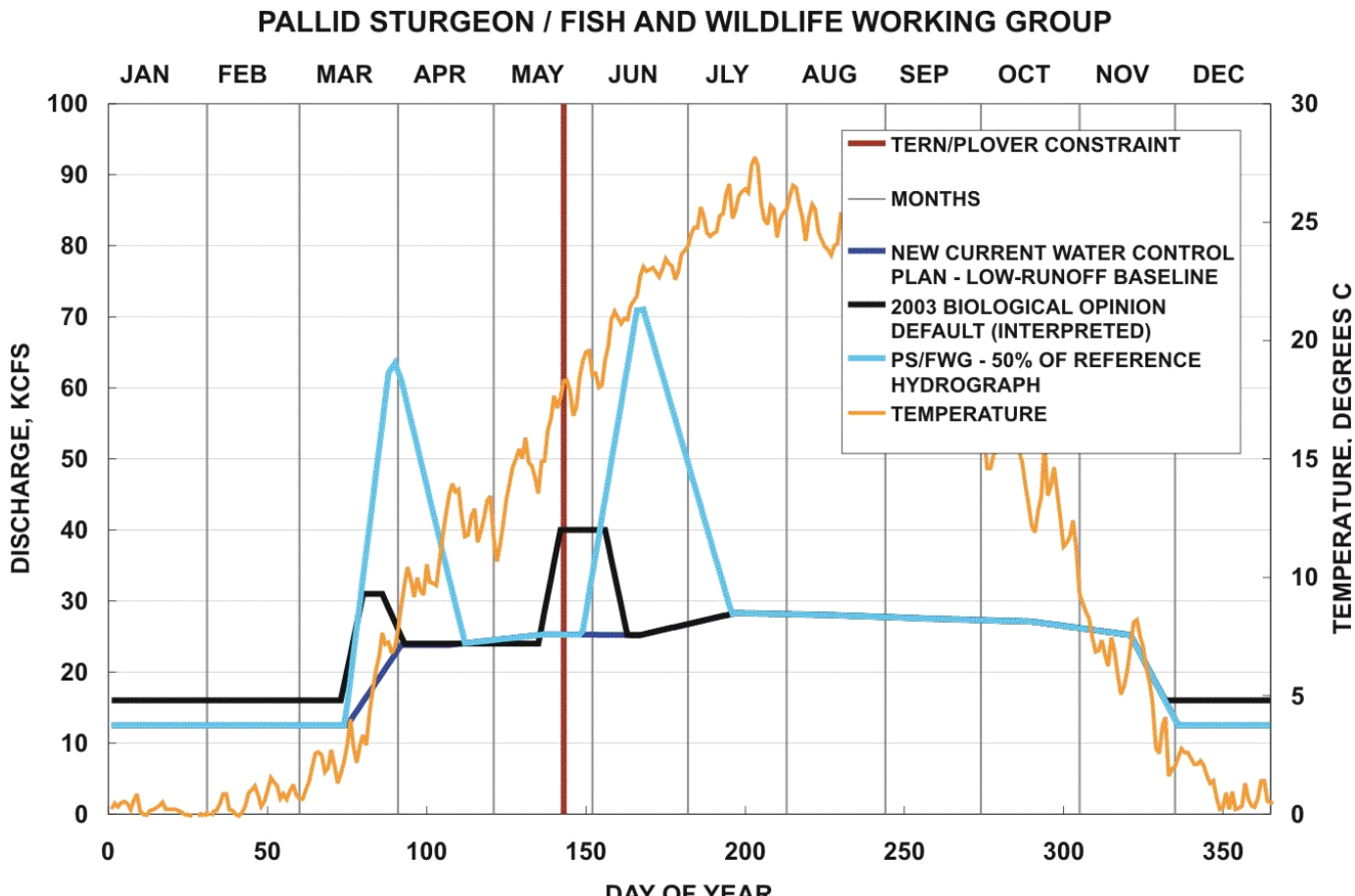
Timing/duration between pulses	April 22 – May 27 (Julian dates 112-148)
Magnitude of flow	~23 Kcfs stable with slight increase

- e. **Timing, duration, magnitude, rise and fall rates of Second Rise:** The second rise should start when water temperature (at Sioux City) reaches ~16 ° C (for second time on ascending limb of thermograph). Rise should start on May 27, rise for 19 days to the peak and then descend for 26 days. Duration of the second pulse is important for physical and biological reasons (i.e., habitat creation, egg hatch...)

Start of rise	May 27 (Julian date 148)
Peak of rise	June 16 (Julian date 168)
End date	July 13 (Julian date 195)
Relative rising peak (Kcfs)	45.8 Kcfs (~71 Kcfs total peak)
Total pulse duration	47 days

- f. **How does this address water availability? Variation for wet, normal or dry years (including Stop Protocols or precludes):** This proposal uses the 50th percentile of the long term flow record. This proposal uses a peak pulse to address the physical component of the natural hydrograph. This proposal would require that this occur under wetter scenarios than currently exist.
- f. **Volume of water used:** This proposal will utilize 3.86 MAF more than the current water control plan.
- g. **Level of and purposes for flexibility in its annual application (What is the intended flexibility given to USACE in its application of this proposal?):** Flexibility exists within magnitude, timing and duration on both rises. Actual amount of water needed for habitat forming flows is uncertain and some flexibility is warranted. As experiment matures and water availability changes different flow scenarios are expected. The specifics of this flexibility will be influenced by what we learn with each new run and the changes that occur within the basin over time.

2. **Hydrograph chart (with sideboards visually noted):** This proposal is indicated by the dark blue line: PS/FWG - 50% of Reference



3. Rationale for proposal:

Biological – The rationale for this proposal is based on the natural hydrograph and our current understanding of *Scaphirhynchus* sturgeon (shovelnose and pallid sturgeons) biology. Timing of the two peaks is based on best available evidence of *Scaphirhynchus* reproductive biology.

The rises in the natural hydrograph are responsible for forming and maintaining spawning habitats. They also historically inundated the floodplain which contributed organic material back to the river. The annual spring rises provided ecological cues for fish spawning and generally maintained the dynamic character of the Missouri River ecosystem. Based on the National Research Council 2000 report and the U.S. Fish and Wildlife Service Biological Opinion, some semblance of these functions needs to be restored to promote recovery of the pallid sturgeon. With that said, there are additional biological benefits spring rises provide. Our spring rise should seek to address/accomplish both the physical and biological functions. Based on current water year constraints, addressing the physical aspects of the rise are not possible this year, but it is what is felt is needed for the species and habitat. Species have adapted to the natural hydrograph and receive biological cues from those flows. These smaller pulses are designed to facilitate reproductive success of the pallid sturgeon. The 1st peak is timed to provide a stimulus for migration and condition spawning habitats (clean spawning substrate). If the 1st peak is high enough and long enough it should stimulate adult sturgeon to begin to migrate and stage (i.e., congregate in spawning aggregations). As we progress towards the second peak, based on flow stimulus and increasing temperature the fish are physiologically and behaviorally getting ready to spawn. The second peak is designed to generate habitat benefits and to coincide with a temperature window conducive to spawning (~18 °C). After the peak, the descending limb will take advantage of the greatest flexibility within the temperature window, providing what we think are beneficial spawning environments. The slowly declining limb promotes spawning, facilitates egg incubation, and dispersal of newly hatched larval sturgeon. There are other community benefits that this flow pattern will facilitate that will provide forage base and general diversity that will be beneficial to the sturgeon.

4. Anticipated effects

- a. **Proposal's anticipated effects on, or benefits to, Pallid Sturgeon (how does it assist in flow, timing, temperature, photoperiod, compare with historic hydrograph, comparison with historic flow percentiles, etc):** Our proposal is based on the timing, magnitude, duration, and rate of change of the historical hydrograph within the area of concern, ambient photoperiod, and river temperatures. These factors are universally accepted as critical to reproductive development and successful spawning of riverine fishes, including sturgeons. As we are lacking specific, detailed biological information on exactly what factors affect successful *Scaphirhynchus* spawning this is the most rational approach and

is supported by the scientific literature. The natural hydrograph justifies two rises: the 1st rise is expected to inundate and condition spawning substrate and provide migration cues; the second rise is expected to also inundate and condition spawning substrate, elicit a spawning cue, provide for egg incubation, hatch and larval dispersal. The timing of the proposed second rise is based on our knowledge/understanding of pallid and shovelnose sturgeon reproductive biology in the lower Missouri River and elsewhere. Expected benefits to pallid sturgeon may include: *1st rise* – (1) movement of reproductively mature adults on the first pulse; (2) cleaning of potential spawning substrates; *interval between rises* – (3) movement, staging, and spawning of adults; (4) successful deposition of eggs; (4) incubation of eggs to hatch: *2nd rise* - (5) further cleaning of spawning substrates; (6) movement, staging, and spawning of adults; (7) successful deposition of eggs; (8) incubation of eggs to hatch, and (9) dispersal of newly hatched larvae.

- b. **Proposal’s anticipated effects on, or benefits to, socio-economic factors (how does this Proposal appear to affect water used in the basin, how to flows attenuate, effect on reservoir levels, navigation impacts, what modeling helps understand the effects):**

This proposal would have some affects. Modeling is required to clearly identify those impacts.

- c. **Proposal’s anticipated effects on, or benefits to, historic, cultural and burial sites (how does this Proposal appear to affect historic, cultural and burial sites in the basin, what modeling helps understand the effects):**

5. Brief description of monitoring methods and indicators:

- a. **What are the key indicators to be monitored?**

Documenting each of the nine expected benefits outlined under 4.a. will be required to evaluate if the proposed spring rise contributes to their reproductive success of shovelnose and pallid sturgeon throughout the lower Missouri River. Ongoing programs that will contribute to this include:

Movement of tagged pallid sturgeon, spawning, congregations of fishes; response of sexually mature shovelnose, are being monitored through the USGS telemetry study. Supporting physiological data are also being collected within this effort. Population monitoring is currently underway throughout the entire reach below Gavins Point Dam and will provide monitoring support for adult and juvenile fish. This effort provides trend information for the population over time. There is also fish and habitat monitoring underway which will provide data on what habitats are used by fishes.

Additional research and evaluation will be required and will be designed as outlined in the next section.

- b. **Pending creation of MRRIC, what interim processes should be used to monitor this proposal?** Following this process a group of technical experts should be convened (coordinated by the Corps) to determine the specific monitoring and research objectives that need to be developed, and expanded into study plans. The group should determine the technical skills required to accomplish objectives and acquire the resources necessary to carry out these actions. This needs to be done within the time frame necessary to evaluate the spring rises and provide information back into the process. The success of the spring rise process is dependent on synthesis of the information collected and using that information in an adaptive management frame work to modify this proposal.

The PS/FWG is currently ranking hypotheses related to evaluating the spring rise and the Middle Basin Working Group has finished the ranking process for recovery of the pallid. The efforts within the Spring Rise need to be closely coordinated with the on going activities within the basin to ensure comprehensive, coordinated management of our actions and the species.

- c. **Take the hypothesis developed by this group and provide them to the Middle Basin Pallid Sturgeon Work Group for consideration (e.g., review and comment)**
- d. **Develop a priority of these hypothesis**
- e. Evaluate the number that are or could be tested under current programs
- f. Make recommendations on additional research and funding of the top priorities

Pallid Sturgeon Fish & Wildlife Proposals

Draft of July 22, 2005

Title of Option: PS/FWG Proposal 2

1. Description of the Proposal:

- a. **Number of Rises:** 2
- b. **Flood Control Targets/constraints:** Yes, they must be adjustable. Raise them as much as is necessary to deter them from stopping the rise in most years.
- c. **Timing, duration, magnitude, rise and fall rates of First Rise:** This bi-modal spring rise is represented by the 25%tile of the 100 years of discharge record at Gavins Point Dam . Proposed TOTAL magnitude of the first rise is ~41 Kcfs. Timing of this first pulse needs to occur *before* initiation of spawning window (e.g., ~16 ° C) and on the rising limb of the thermograph.

Start date	March 20 (Julian day 80)
Peak date	March 28 (Julian date 88)
End date	April 9 (Julian date 100)
Relative rising peak, Kcfs	18.0 (~40.5 Kcfs total peak)
Total pulse duration	20 days

For the first pulse, magnitude is more important than duration to condition spawning areas. The ascending limb should occur over 8 days and descending limb should occur over 12 days.

- d. **Timing, duration, magnitude of Flow Between Rises:** Dependent on model output and the specifications of **c.** above and **e.** below. General description would be similar to the following:

Timing/duration between pulses	April 10 – May 14 (Julian dates 101-135)
Magnitude of flow	~23 Kcfs, stable to slightly rising

- e. **Timing, duration, magnitude, rise and fall rates of Second Rise:** The second rise should start when water temperature (at Sioux City) reaches ~16 ° C (for second time on ascending limb of thermograph). Ramp up for 11 days with a two day peak. The descending limb will ramp out to end when river temperature reaches ~24 ° C for the second time. Proposed magnitude of this scenario is ~50Kcfs. Duration with the second pulse is important for biological reasons (i.e., egg hatch, see biological rationale)

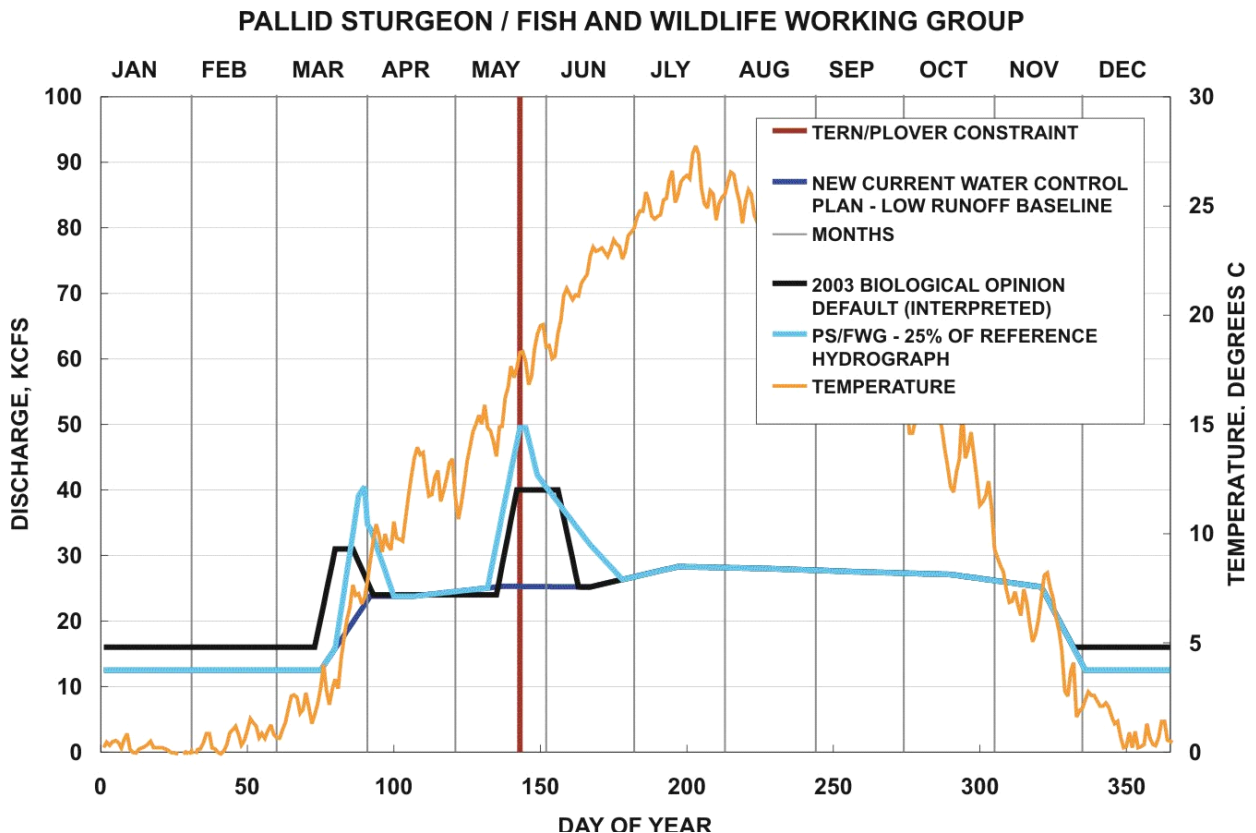
Start date	May 11 (Julian date 132)
Peak date	May 22 (Julian date 143)
End date	June 27 (Julian date 179)
Relative rising peak, Kcfs	24.2 (~49.5 Kcfs total peak)
Total pulse duration	47 days

How does this address water availability? Variation for wet, normal or dry years (including Stop Protocols or precludes): This proposal uses the 25 percentile of the long term flow record, an appropriate percentile based on water availability and species needs. This proposal uses a peak pulse rather than a plateau flow, and includes water conservation measures at most points.

f. **Volume of water used:** 1.286 MAF above the current water control plan..

Level of and purposes for flexibility in its annual application (What is the intended flexibility given to USACE in its application of this proposal?): The 25th percentile option provides a considerable reduction in water releases over the preferred 50 percentile option

2. Hydrograph chart (with sideboards visually noted): This proposal is indicated by the green line: PS/FWG - 25% of Reference



3. Rationale for proposal:

Biological – The rationale for this proposal is based on the natural hydrograph and our current understanding of *Scaphirhynchus* sturgeon (shovelnose and pallid sturgeons) biology. Timing of the two peaks is based on best available evidence of *Scaphirhynchus* reproductive biology.

The rises in the natural hydrograph are responsible for forming and maintaining spawning habitats. They also historically inundated the floodplain which contributed organic material back to the river. The annual spring rises provided ecological cues for fish spawning and generally maintained the dynamic character of the Missouri River ecosystem. Based on the National Research Council's 2000 report and the U.S. Fish and Wildlife Service's Biological Opinion, some semblance of these functions needs to be restored to promote recovery of the pallid sturgeon. With that said, there are additional biological benefits spring rises provide. This proposed spring rise seeks to address/accomplish both physical and biological functions. Based on current water year constraints, addressing the physical aspects of the rise is not possible this year, but it is possible to address the biological components of the rise. Species have adapted to the natural hydrograph and receive biological cues from those flows. These smaller pulses are designed to facilitate reproductive success of the pallid sturgeon. The 1st peak is timed to provide a stimulus for migration and condition spawning habitats (i.e., clean spawning substrate). If the 1st peak is high enough and long enough it should stimulate adult sturgeon to begin to migrate and stage (i.e., congregate in spawning aggregations). As we progress towards the second peak, based on flow stimulus and increasing temperature the fish are physiologically and behaviorally getting ready to spawn. The second peak is designed to coincide with a temperature window conducive to spawning (~18 °C). After the peak, the descending limb will take advantage of the greatest flexibility within the temperature window, providing what we think are beneficial spawning environments. The slowly declining limb promotes spawning, facilitates egg incubation, and dispersal of newly hatched larval sturgeon. There are other community benefits that this flow pattern will facilitate that will provide forage base and general diversity that will be beneficial to the sturgeon.

4. Anticipated effects

- a. **Proposal's anticipated effects on, or benefits to, Pallid Sturgeon (how does it assist in flow, timing, temperature, photoperiod, compare with historic hydrograph, comparison with historic flow percentiles, etc):** Our proposal is based on the timing, magnitude, duration, and rate of change of the historical hydrograph within the area of concern, ambient photoperiod, and river temperatures. These factors are universally accepted as critical to reproductive development and successful spawning of riverine fishes, including sturgeons. As we are lacking specific, detailed biological information on exactly what factors affect successful *Scaphirhynchus* spawning this is the most rational approach and is supported by the scientific literature. The natural hydrograph justifies two rises: the 1st rise is expected to inundate and condition spawning substrate and provide migration cues; the second rise is expected to also inundate and

condition spawning substrate, elicit a spawning cue, provide for egg incubation, hatch and larval dispersal. The timing of the proposed second rise is based on our knowledge/understanding of pallid and shovelnose sturgeon reproductive biology in the lower Missouri River and elsewhere. Expected benefits to pallid sturgeon may include: *1st rise* – (1) movement of reproductively mature adults on the first pulse; (2) cleaning of potential spawning substrates; *interval between rises* – (3) movement, staging, and spawning of adults; (4) successful deposition of eggs; (4) incubation of eggs to hatch: *2nd rise* - (5) further cleaning of spawning substrates; (6) movement, staging, and spawning of adults; (7) successful deposition of eggs; (8) incubation of eggs to hatch, and (9) dispersal of newly hatched larvae.

- b. **Proposal’s anticipated effects on, or benefits to, socio-economic factors (how does this Proposal appear to affect water used in the basin, how to flows attenuate, effect on reservoir levels, navigation impacts, what modeling helps understand the effects):**

There will be impacts to various entities based on this scenario. In crafting this proposal we considered navigation, interior drainage and terns and plovers, and reservoir storage and worked to minimize those impacts as much as possible.

- c. **Proposal’s anticipated effects on, or benefits to, historic, cultural and burial sites (how does this Proposal appear to affect historic, cultural and burial sites in the basin, what modeling helps understand the effects):**

5. Brief description of monitoring methods and indicators:

- a. **What are the key indicators to be monitored?**

Documenting each of the nine expected benefits outlined under 4.a. will be required to evaluate if the proposed spring rise contributes to their reproductive success of shovelnose and pallid sturgeon throughout the lower Missouri River. Ongoing programs that will contribute to this include:

Movement of tagged pallid sturgeon, spawning, congregations of fishes; response of sexually mature shovelnose, are being monitored through the USGS telemetry study. Supporting physiological data are also being collected within this effort. Population monitoring is currently underway throughout the entire reach below Gavins Point Dam and will provide monitoring support for adult and juvenile fish. This effort provides trend information for the population over time. There is also fish and habitat monitoring underway which will provide data on what habitats are used by fishes.

Additional research and evaluation will be required and will be designed as outlined in the next section.

- b. **Pending creation of MRRIC, what interim processes should be used to monitor this proposal?** Following this process a group of technical experts should be convened (coordinated by the Corps) to determine the specific monitoring and research objectives that need to be developed, and expanded into study plans. The group should determine the technical skills required to accomplish objectives and acquire the resources necessary to carry out these actions. This needs to be done within the time frame necessary to evaluate the spring rises and provide information back into the process. The success of the spring rise process is dependent upon synthesis of the information collected and using that information in an adaptive management frame work to modify this proposal.

The PS/FWG is currently ranking hypotheses related to evaluating the spring rise and the Middle Basin Working Group has finished the ranking process for recovery of the pallid. The efforts within the Spring Rise need to be closely coordinated with the on going activities within the basin to ensure comprehensive, coordinated management of our actions and the species. Our approach will entail:

Take the hypotheses developed by this group and provide them to the Middle Basin Pallid Sturgeon Work Group for consideration (e.g., review and comment)

Prioritize revised hypotheses

Evaluate those hypotheses that are or could be tested under current programs

Make recommendations on additional research and funding of the top priorities

Pallid Sturgeon Research and Monitoring (Spring Rise in 2006 or not)

- Population assessment
- Track fish
- Catch fish that are believed to have spawned
- Nets below likely spawning areas to try and catch larvae
- Habitat assessment
- For pallid sturgeon activity, try and determine relative importance of flow, turbidity, temperature, and photoperiod
- In the short term, need team of experts to lead this – two people are necessary: a program administrator, and a science administrator (Corps/FWS/USGS); once recovery committee is on line, need to develop integrated monitoring and research program and an adaptive management program tied to independent science and including multi-stakeholder involvement
- Expert group needs to develop a 10-year study design for pallid sturgeon; we need ongoing research, but also focused projects that answer specific questions related to pallid sturgeon life history
- Need to focus on Gavins Point reach AND reach in Missouri where there is already a “natural” spring rise to address concerns from public meeting; need to be able to make comparisons and to be able to address issue of what’s happening in reach where there is already a spring rise due to precipitation and substantial tributary input; this may require additional resources and manpower over and above ongoing research and monitoring
- Team of experts should develop recommendation that Pallid Sturgeon Recovery Team allow a percentage of sexually mature adults in river to track and catch them; try to get some adults left in river instead of all going immediately into propagation facilities
- Open and transparent process to prioritize monitoring objectives; we need to focus on pallid sturgeon, but we can’t sacrifice ongoing monitoring on things like tern & plover habitat and other projects for increased pallid sturgeon monitoring
- Outreach of information on a continual basis to stakeholders should be a priority

Socio-Economic Technical Working Group Spring Rise Proposal

Draft of July 22, 2005

Title of Option: Modified Pallid Sturgeon Fish & Wildlife Proposal 1 7-21 (PAFW PROP 1 7-21)

Note: Excluding fish and wildlife resource interests (an authorized use which would continue to be significantly compromised/impacted) and certain recreational users, the members of the Socio-Economic Technical Working Group (SETWG) expressed unanimous support for the recommendations contained in this report. (The strongest divergence of opinion centered on the desirability of a single or bimodal rise.)

1. Description of the Proposal:

Tables 1A and 1B provide general rationale for the following:

a. Number of Rises:

Strong preference for 1 mode; however, the SETWG has noted its preferences regarding a second rise should it be required below.

b. Flood Control Targets/constraints:

Minimal to no adjustment.

c. Timing, duration, magnitude, rise and fall rates of First Rise:

- **Timing:** Start of the First Rise should begin soon enough so release levels coincide with minimum navigation service release levels from Gavins Point by March 23rd (rise should begin March 21- 22 and decline to flow-to-target minimum navigation service levels by April 7th)
- **Magnitude:** < 35 kcfs. James River flows should count toward flow levels throughout the Spring Rise.
- **Rise:** As steep as possible
- **Fall:** As steep as possible

d. Timing, duration, magnitude of Flow Between Rises:

Minimum navigation service levels flow-to-target

e. Timing, duration, magnitude, rise and fall rates of Second Rise:

- **Timing:** Timing should be such that the initial 30% decline from the peak of the Second Rise should be completed as close as possible to May 21st.
- **Magnitude:** ≤52 kcfs. The critical component of magnitude is the length of time the peak is above the critical floodgate gate gage level (CFGGL, yet to be determined). Specifically, the peak above the CFGGL should be as short as possible, 1-3 days. Magnitude should be prorated based upon storage and the most up-to-date runoff predictions for areas above and below Sioux City. James River flows should count toward flow levels throughout the Spring Rise.
- **Rise:** As steep as possible
- **Fall:** As steep as possible down to the CFGGL. Duration and rate of fall are less critical once levels are below the CFGGL.

f. How does this address water availability? Variation for wet, normal or dry years (including Stop Protocols or precludes):

This rise is designed for dry conditions with regard to low mainstem storage levels and low runoff levels. By starting the rise later in May, storage is saved in upper basin reservoirs. Flow-to-target during May benefits system storage relative to the CWCP. Starting the second rise at flow-to-target levels will lessen the magnitude while still maintaining the delta (stage change). Mountain snowpack generally begins entering the system later in May allowing for timely replacement of storage in mainstem reservoirs. At the same time, by May 21, possibly earlier, agricultural interests down river face the inability to replant if the peak results in interior drainage problems.

Group should discuss stop protocols.

Flooding and/or a spring rise resulting in mainstem storage dropping to a level that threatens water intakes in the reservoirs (38 MAF)

g. Volume of water used:

Design incorporates socioeconomic recommendations into the Pallid Sturgeon Fish & Wildlife Proposal 1 7-21 (PAFW PROP 1 7-21). The SETWG will attempt to provide this calculation for presentation to the Plenary Group.

2. Hydrograph chart (with sideboards visually noted):

SETWG will attempt to have a hydrograph completed for presentation to the Plenary Group.

3. Anticipated effects

a. Proposal's anticipated effects on, or benefits to, Pallid Sturgeon (how does it assist in flow, timing, temperature, photoperiod, compare with historic hydrograph, comparison with historic flow percentiles, etc):

This proposal works off of recommendations from the Pallid Sturgeon Technical Working Group.

b. Proposal's anticipated effects on, or benefits to, socio-economic factors (how does this Proposal appear to affect water used in the basin, how to flows attenuate, effect on reservoir levels, navigation impacts, what modeling helps understand the effects):

The group provides general observations regarding impacts in Table 2. A thorough accounting of impacts is necessary and will require formal study.

c. Proposal's anticipated effects on, or benefits to, historic, cultural and burial sites (how does this Proposal appear to affect historic, cultural and burial sites in the basin, what modeling helps understand the effects):

This proposal will minimize losses to mainstem system storage. In fact because the May peak will now more closely coincide with mountain snowpack runoff, mainstem system storage from the start to finish of the spring rise may realize little relative change.

4. Brief description of monitoring methods and indicators:

A monitoring regime that measures impacts of the Spring Rise to all socio-economic interests/uses should be in place prior to implementation. The SETWG lacked expertise to develop a list of indicators and strategies and therefore recommends that an expert and impartial third party is identified to develop a monitoring regime. An ad-hoc committee should be appointed to select this group. The SETWG believes that mitigation and/or compensation strategies that are closely tied to the results of monitoring efforts should be evaluated.

Table 1A, Socio-Economic Interests Regarding Certain Characteristics of a <i>First</i> 2006 Spring Rise										
	DURATION	TIMING	QUANTITY	MODES	RATE OF RISE	RATE OF FALL	PRE-RISE DISCHARGE ¹	PRECLUDE ²	PRORATE ³	FLOOD ⁴ CONTROL CONSTRAINT
USE	S/L Short/Long	E/L Early/Late	1/2/3 Sm/Med/Large	1/2 Single/Bi	1/2/3 Slow/Med/Fast	1/2/3 Slow/Med/Fast	1/2/3 11-18/18-25/25-35	1/2/3/4/5 ≤31/≤35/≤40/≤45/≤57	1/2/3/4 ≤31/≤35/≤40/≤45	=/≤/0 (0=no change)
FC	S	E	1	1	3	3		4	4	0
Hydro	S	L	1	1	3	3		4	4	0
Therm	S	L ⁵	1	1	3	3		4	4	0
Nav	S	E	1	1	3	3		5	5	0
W Supp	S	L	1	1	3	3		4	4	NA
W Qual	S/L ⁶	L	1/2/3 ⁷	1	3	3		3	4	NA
Irr	S	E	1	1	3	3		3	4	NA
Rec	S	L ⁸	1	1	3	3		3	4	NA
Ag	S	E ⁹	1	1	3	3		5	5	0
Riparian	S	E	1	1	3	1		3	3	0
Fish/Wild	S/L	Mimic natur	3 or mimic	2	2	1		1	1	=

¹ Since system releases are at CWCP winter release levels prior to the first rise, pre-rise discharge is not an issue.

² These two terms are often intertwined with storage levels. Many of the concerns with fluctuations in storage levels and a spring rise are intimately tied with runoff in a given year. Concerns about fish production in reservoirs may be completely eliminated if runoff is sufficient to provide both a spring rise and rising elevations in mainstem reservoirs. Conversely, during a low runoff year, the harms to fish production will be exacerbated with the addition of a spring rise. This has very little to do with mainstem storage levels (other than surface area of water) and everything to do with the amount of water (runoff), coming into the system.

³ Spring Rise may be prorated based on system storage or runoff.

⁴ Flood control constraint is raised to a level equal to the Spring Rise (=), is raised to a level less than the Spring Rise (<), or is not raised at all.

⁵ July or August.

⁶ Increased storage improves water quality in reservoirs. Water quality in riverine stretches is maintained with sufficient flows.

⁷ Ibid.

⁸ Gamefish interests would prefer that a Spring Rise occur outside of the April 7 – May 31 spawning period.

⁹ By May 21. The rise must be done early enough so that it does not compound the natural rise occurring during this period.

Table 1B, Socio-Economic Interests Regarding Certain Characteristics of a <i>Second</i> 2006 Spring Rise										
	DURATION	TIMING	QUANTITY	MODES	RATE OF RISE	RATE OF FALL	PRE-RISE DISCHARGE	PRECLUDE ¹⁰ 11 12	PRORATE ¹³	FLOOD ¹⁴ CONTROL CONSTRAINT
USE	S/L Short/Long	E/L Early/Late	1/2/3 Sm/Med/Large	1/2 Single/Bi	1/2/3 Slow/Med/Fast	1/2/3 Slow/Med/Fast	1/2/3 11-18/18-25/25-35	1/2/3/4/5 ≤31/≤35/≤40/≤45/≤57	1/2/3/4 ≤31/≤35/≤40/≤45	=/</0 (0=no change)
FC	S	E	1	1	3	3	1	4	4	0
Hydro	S	L	1	1	3	3	1/2 ¹⁵	4	4	0
Therm	S	L ¹⁶	1	1	3	3	1/2/3 ¹⁷	4	4	0
Nav	S	E	1	1	3	3	3 ¹⁸	5	5	0
W Supp	S	L	1	1	3	3	1/2 ¹⁹	4	4	NA
W Qual	S/L ²⁰	L	1/2/3 ²¹	1	3	3	1/2 ²²	3	4	NA
Irr	S	E	1	1	3	3	1	3	4	NA
Rec	S	L ²³	1	1	3	3	1	3	4	NA
Ag	S	E ²⁴	1	1	3	3	1/2/3 ²⁵	5	5	0
Riparian	S	E	1	1	3	1		3	3	0
Fish/Wild	S/L	Mimic natur	3 or mimic	2	2	1	1	1	1	=

¹⁰ Spring Rise may be precluded based on system storage or runoff. Responses were made on the basis of a water consumptive spring rise. If the spring rise added water to storage in mainstem reservoirs through the flexibility afforded by a low (i.e. winter release level) pre-rise discharge, then a preclude would not be requested.

¹¹ If the annual spring rise in Oahe reservoir falls below 1578' feet MSL elevation on March 15, 2006 and/or if projections show at any time an MSL elevation for Oahe at or below 1567' we recommend a preclude to a 'spring rise' release. Maintaining these elevations is absolutely critical in maintaining an adequate water supply for at least 14,000 people living on or near the Cheyenne River Sioux Tribe Indian Reservation in central South Dakota.

¹² Preclude and proration are often intertwined with storage levels. Many of the concerns with fluctuations in storage levels and a spring rise are intimately tied with runoff in a given year. Concerns about fish production in reservoirs may be completely eliminated if runoff is sufficient to provide both a spring rise and rising elevations in mainstem reservoirs. Conversely, during a low runoff year, the harms to fish production will be exacerbated with the addition of a spring rise. This has very little to do with mainstem storage levels (other than surface area of water) and everything to do with the amount of water (runoff), coming into the system.

¹³ Spring Rise may be prorated based on system storage or runoff.

¹⁴ Flood control constraint is raised to a level equal to the Spring Rise (=), is raised to a level less than the Spring Rise (<), or is not raised at all.

¹⁵ Releases should be sufficient to meet normal hydropower demands. Winter releases, a period of high power demand, are around generally about 11 kcfs. Pre-rise discharge would be at a time of lower power demand, April-May. Therefore a 1 is likely warranted. Moreover, by increasing storage, head is increased above the turbines and more water is available for release during the summer, another period of high hydropower demand.

¹⁶ July or August.

¹⁷ Low releases during April-May would not impact thermal power production. It may be a positive as more water would be available during the summer when greater quantities are needed for cooling. If the Spring Rise is later than April, a 2 would be more appropriate. If the second rise is later than May, a 3 may be more appropriate.

¹⁸ See xxvi

¹⁹ Releases should be sufficient to meet water supply needs. Water supply needs are met at winter release levels for riverine intakes. Early season (April/May) releases could be similar to winter releases and still meet riverine water intake/supply needs. Additionally, increased storage would benefit reservoir based water intakes. Therefore a 1 is likely warranted.

²⁰ Increased storage improves water quality in reservoirs. Water quality in riverine stretches is maintained with sufficient flows.

²¹ Ibid.

²² Ibid.

²³ Gamefish interests would prefer that a Spring Rise occur outside of the April 7 – May 31 spawning period.

²⁴ By May 21. The rise must be done early enough so that it does not compound the natural rise occurring during this period. *Dave Sieck will further clarify as necessary.*

²⁵ A lower pre-rise discharge would increase flood protection to flood plain agriculture.– Spring rise releases which decrease reservoir levels potentially decrease navigation days/service levels, or worse case scenario, precluding navigation (1" of service level = 17 tons/barge). The decreased flows would directly impact efficiency of the middle Mississippi River. (Note: Total economic impact to upper MS/IL River \$2.3 billion/yr). If flow is reduced below navigation service levels in April, navigation would be severely crippled, since historically 40% of ag business is in April/early May. 1 barge = 58 trucks/increases to air pollution. Terminal access could be limited/lost by flooding during "rise." Declining reservoir levels would long-term negatively impact water available for navigation. Man-made flooding degrades navigation channel.

	Potential Impact	Measure	Monitoring Mechanism	Mitigation
Flood Control	FEMA Flood Insurance Program	Ruling from FEMA	National Weather Service/USACE	Policy Change / Pay no matter what
Flood Control	Internal Drainage	Pumping and/or Flood Insurance	Levee Board/USACE	Pay pumping costs and all crop loss
Flood Control	Bank Erosion above revetment	Rip-rap/rock is too low. It needs to be higher up the revetment	Levee Board/USACE	Replace revetment to project authorization
Flood Control	Levee overtop	Raise Levees	Levee Board/USACE	Policy change – pay for all floods including small floods. (or) Raise/Move levees (USACE pay)

	Potential Impact	Measure	Monitoring Mechanism	Mitigation
Hydropower	Flow regime changes from Gavins Point Dam required to support a Spring Rise may result in a shift in Mainstem hydropower generation from periods of peak electrical demand to off-peak periods. Such shifts could result in increased costs to the Western Area Power Administration (WAPA) to supply their firm commitments, thereby increasing the costs to their customers.	Additional costs (\$) associated with hydropower capacity and energy marketed by WAPA.		
Hydropower	Flow regime changes from Gavins Point Dam required to support a SR will result in a shift in mainstem hydropower generation from seasonal periods of high demand to seasonal periods of low demand. Shifting generation to low demand periods has two impacts. Generation surpluses to Western's contractual commitments is sold at very low prices. To the extent that less water is available to meet contractual commitments, Western will have to purchase power at high prices and have no surplus power to sell at these high prices. Long term shifts in generation that results in Western increasing purchases and lost surplus sales could price Western's firm power out of the market and jeopardize repayment of the federal investment or force Western to reduce allocations and prompt construction of base load power plants (typically coal fired). Flows out of Gavin's Point of over 35,000 cfs requires spilling water resulting in no generation.		<p>Generation amounts by month and compare to similar storage level at March 15th for current Master Manual.</p> <p>Quantity of power purchased and sold by month and compare to similar March 15 level storage for current Master Manual.</p> <p>Dollar amounts for purchased power and power sold, and compare to similar year for March 15 storage for current Master Manual.</p> <p>Track power prices, compare to normal (average?) year. Note any anomalies that might have affected prices.</p> <p>Footnote: The continuing drought could adversely impact the availability of supplemental or replacement power, perhaps causing a domino effect</p>	Later peaks. Faster ramp up and downs to 35,000 cfs. Deem adverse impacts due to SR (not drought, not flood) non-reimbursable and be funded by Congressional appropriations

	Potential Impact	Measure	Monitoring Mechanism	Mitigation
Thermal				
Water quality effects of the Spring Rise alternatives on the river segments of the Missouri River	Flow regime changes from Gavins Point Dam associated with a Spring Rise, when combined with high summer air temperatures, may affect the ability of downstream water users to meet NPDES permits for thermal discharges. Depending upon the frequency of occurrence, power plants may need to reduce generation levels, or consider alternatives such as cooling ponds or cooling towers in order to maintain compliance with NPDES permits. ¹	<p>1) Additional costs (\$) associated with replacement capacity and energy.</p> <p>2) Additional costs (\$) associated with supplemental or alternative cooling systems.</p>		States will enforce NPDES permit conditions for thermal discharges. Renewed NPDES permits may need to be changed due to the change in flow regimes from Gavins Point Dam. Including appropriate preclude or proration constraints for providing a Spring Rise could also help to mitigate potential impacts.
Navigation				

	Potential Impact	Measure	Monitoring Mechanism	Mitigation
Water Supply				
Water Supply effects of the Spring Rise alternatives on the river segments of the Missouri River	Flow regime changes from Gavins Point Dam associated with a Spring Rise could result in increased maintenance costs related to additional amounts of sedimentation and trash being deposited in the intake structures of water supply facilities downstream from Gavins Point dam. ¹	1) Additional costs (\$) associated with cleaning silt and other debris from water supply intake structures. 2) Additional costs (\$) associated with modifications to intake structures to reduce sedimentation and trash build up.		Modifications to water supply intake structures may help to reduce the build up of sedimentation and trash. Including appropriate preclude or proration constraints for providing a Spring Rise could also help to mitigate potential impacts.
Water Supply reservoirs	Loss of municipal water supply begins at the following elevations Garrison 1801.5 – Shutdown of Parshall Oahe 1564 – Shutdown Wakpala Fort Peck ???	Individual reservoir elevation vs. individual intake elevation	USACE database	Minimize reservoir declines, Extend intakes, alternative water supplies (expensive)

	Potential Impact	Measure	Monitoring Mechanism	Mitigation
Water Quality				
Water quality effects of the alternatives on the Missouri River mainstem lakes.	Severe fluctuations in lake elevations in Fort Peck Lake, Lake Sakakawea, and Lake Oahe may affect the size and quality of coldwater fish habitat. Coldwater Garrison 800,000 acre ft impacts 200,000 acre ft likelihood of fish kill increases.	Acre feet	State Agencies Hydroacoustic Survey	As part of the Missouri River adaptive management process, the Corps, Tribes, States, and EPA should evaluate the relationship between coldwater habitat and water quality to lake elevations based upon reliable water quality monitoring data.
Irrigation	Start losing irrigation intakes at system storage levels of ~43 MAF	Develop database on irrigation intakes	Check data	Extend / Relocate Intakes. Not always feasible

	Potential Impact	Measure	Monitoring Mechanism	Mitigation
Recreation	<p>The CWCP does not allow for water levels to be maintained during the critical period for fish production (April-June) in mainstem reservoirs under certain runoff scenarios. Spring rise proposals which increase the loss of water from mainstem reservoirs would exacerbate the impacts to reservoir fish populations.</p> <p>With regard to the spring rise and fluctuating reservoir levels -the first peak should end prior to April 7 and the second peak should begin late as possible, i.e. late May, June or even July. The interphase release levels should be kept as low as possible</p>	Under runoff scenarios which would cause reservoirs to fall during the period April – May, adopt a spring rise plan which adds water to reservoirs during the pre-rise phase and/or the interphase between rises	State fish & game agencies monitor fisheries in mainstem reservoirs.	Balance harms
Recreation	Loss of use & boat ramp access loss becomes an issue ~45 to 40 MAF	Maintain database	Check data	Extend / Relocate to the extent possible. Not possible in all instances.
Recreation	<p>Oahe mid 90's \$25 million/river</p> <p>Recent years \$8-9 year.</p> <p>Similar losses to Lake Sakakawea and Fort Peck fishing industries</p>	Under runoff scenarios which would cause reservoirs to fall during the period April – May, adopt a spring rise plan which adds water to reservoirs during the pre-rise phase and/or the interphase between rises	State agencies monitor usage	???

	Potential Impact	Measure	Monitoring Mechanism	Mitigation
Agriculture	Lost Land, lost real estate/value	1.4 million acres in the Missouri River flood plain	Historical land value/affected land vs. non-affected land	Taxpayers pay
Agriculture	Crop damage/loss of income	Dollars/acre	Farm Service Agency	\$/acre x total lost acres
Agriculture	Shipping costs barge vs. rail	Shipping Rate difference - Basis in winter (no barge traffic) vs basis during navigation season	Check prices during the year. Pro Exporter, FAPRI	???
Agriculture	Loss of Market/ Disruption to barge service resulting in less places to sell grain	Water compelled rates	New or historic studies	???
Agriculture	Land Loss / erosion	Count acres	Farm Service Agency	Taxpayers pay
Agriculture	Crop Insurance	Lower average yield/base for crop insurance due to more frequent flooding	FSA	New type of insurance to cover man-made floods

	Potential Impact	Measure	Monitoring Mechanism	Mitigation
Riparian	Bank Degradation/loss of land	Value/acres x lost acres	USDA, real estate values	Taxpayers pay
	<p>A. For riparian landowners on the Ponca, NE-Yankton, SD reach of the Missouri, the principal (and much dreaded) impact would be the inevitable increase in the already severe erosion. Land lost is never restored as usable land.</p> <p>Exacerbating the prospect of increased losses is the fact that the “spring-rise” proposal is <u>intended</u> to erode the river’s shorelines. USACE <u>stated aim</u> of the “spring-rise” proposal is to put more nutrients in the water for fish.</p> <p>B. Bottom-degradation is lowering the river bed and also the water table. Cottonwood forests, e.g., are not replacing themselves; head-cutting on the tributaries increases, intake structures etc., have to be lowered and bridges are endangered.</p>	<p>A. Do not increase the flows</p> <p>B. Bank stabilization (would not defeat one aim of the “spring-rise.”</p> <p>C. Compensation (\$\$\$) for the riparian owners for land losses, etc.</p>	Land records. USDA has aerial photos/maps via which the exact amount of the loss can be determined	COMPENSATION (see measures)

	Potential Impact	Measure	Monitoring Mechanism	Mitigation
Fish Wildlife / Ecosystem	1st Order Social/Economic Impacts (Positives)			
Fish Wildlife / Ecosystem	<ul style="list-style-type: none"> • Increase in fisheries • Increase in waterfowl, raptors, birds • Increase in riparian fauna • Habitat for pollinators and biocontrol agents • Preservation of genetic diversity 	<ul style="list-style-type: none"> • Population viability • Age structure • Reproductive success • Indicator species • Habitat index for quality • Biodiversity from baseline 	State, tribal and federal agencies develop monitoring plans for various biotic and abiotic parameters	None needed---overall tremendous realization of cost savings in the long-term to numerous natural resources and other service flows
Fish Wildlife / Ecosystem	<ul style="list-style-type: none"> • Wildlife viewing opportunities and other recreational amenities 	<ul style="list-style-type: none"> • State/local parks etc. visitor with satisfaction survey 		None needed---overall tremendous realization of cost savings in the long-term to numerous natural resources and other service flows
Fish Wildlife / Ecosystem	<ul style="list-style-type: none"> • Overall cost-saving to the taxpayer less restoration efforts, T/E recovery efforts. • Reduced need for NRCS floodplain programs, wetland loss programs, and other mitigation requirements • Less \$ for stocking restoration efforts 	Data from state and federal agencies		None needed---overall tremendous realization of cost savings in the long-term to numerous natural resources and other service flows
Fish Wildlife / Ecosystem	<ul style="list-style-type: none"> • More habitat available in and adjacent to the floodplain • Improved contaminant sinks • Bio-transformation of excess nutrients 	<ul style="list-style-type: none"> • Habitat surveys and/or indices • State/Federal agencies 		None needed---overall tremendous realization of cost savings in the long-term to numerous natural resources and other service flows.

	Potential Impact	Measure	Monitoring Mechanism	Mitigation
Fish Wildlife / Ecosystem	<ul style="list-style-type: none"> • Production clean water (more sustainable, natural system). • Protection of recharge areas and watersheds • Detention of potential floodwaters • Reduction of erosion and sedimentation shoreline stability— Less \$ for stabilization • Production of topsoil • Improved resilience to external perturbation, therefore less need to perform follow-up maintenance 	<ul style="list-style-type: none"> • Water Quality – turbidity, metals • Physical chemical parameters • Floodplain assessment in structure and function from over-time (improvement) 		None needed---overall tremendous realization of cost savings in the long-term to numerous natural resources and other service flows
	2nd Order Social/Economic Impacts: (Positives)			
Fish Wildlife / Ecosystem	<ul style="list-style-type: none"> • Increased tourism • Increased \$ from Recreational goods/services • More \$ to communities • More opportunities to capture medicinal benefits of plant/animal populations • Less cost to taxpayer for restoration, maintenance, programs • Increased fish & game based recreation • Natural groundwater recharge 	Sandbars used by hunters Fishing licenses (in-state/out-of-state) Chamber of Commerce data See NAP report 2002	Need an economic model or economist	

Social/Economic Monitoring Recommendation:

Prior to implementing a Spring Rise, baseline data should be collected to better understand and evaluate the intensity/magnitude of economic impacts (both positive and negative) to fish and wildlife, navigation, agriculture, hydro power, tribal interests, landowners, and other interests. To the extent practicable, any existing information should be collected and used today in order to better evaluate the 7 proposals submitted to date. Baseline data should also be used to develop a long-term monitoring plan that would be integrated into the adaptive management process for recovery efforts on the Missouri River. Additionally, an evaluation of potential economic impacts associated with a spring rise under various conditions (wet/dry; single/bimodal; magnitude/duration) is recommended.

Process:

1. Establish an Ad hoc committee to select an impartial, independent third party responsible for the development of a scope of work to evaluate the social and economic effects of a Spring Rise under varying conditions. The third party team should be composed of economists with appropriate experience in the affected industries. The assessment would identify relevant parameters to evaluate and data to collect prior/following a Spring Rise. This would enable the development of an analysis of the economic impacts associated with a Spring Rise. Basin Stakeholder representatives would be involved in identifying issues/concerns, data needs, and available data/models. In addition to the suggested indicators and parameters submitted by the Socio-Economic Technical Group (Spring Rise Proposal, July 22, 2005) see below:

- Power industry (changes in rates directly associated with spring rise or any additional costs for power production/sales)
- Levee heights, location, pumps (location)
- Barge traffic (numbers, product delivered in tons)
- Aerial LIDAR photo's pre and post of the basin
- Economic benefits associated with river recovery (healthy/sustainable ecosystem)
- Flood damage (acres, landowners impacted, crop loss, etc.)
- Tribal issues: Water supply (drinking, medical issues)
- Others issues not identified by Cultural/Historical Technical group
- Hunting/Fishing licenses; Johnson/Dingle Funds
- Available State/Federal agency user surveys

2. The Spring Rise should include a public education component. An inter-agency team should develop credible and accurate sources of information regarding the spring rise.

3. A Risk Assessment should be conducted to address vulnerabilities and consideration of appropriate mitigation (purchase pumps, compensation, etc). Any mitigation and/or compensation strategies should be closely tied to the results of the monitoring efforts.

4. A detailed/comprehensive monitoring plan to evaluate economic costs/benefits should be incorporated into the long term, MRRIC process.

HISTORICAL, CULTURAL AND BURIAL SITES

TECHNICAL WORKING GROUP

COMMENTS TO THE PLENARY GROUP

MISSOURI RIVER 2006 SPRING RISE

Disclaimer: This report is solely the product of the Historical, Cultural and Grave Sites Technical Working Group of the Missouri River 2006 Spring Rise Plenary Group. Nothing in this report may be construed to convey an official position of all affected Missouri River Tribes on this matter. Such positions can only be arrived at through government-to-government consultation.

SECTION I BACKGROUND

Given current drought conditions and lack of information available today, it is impossible to make a rational analysis of sacred, cultural and historic resource impacts of various spring rise proposals with any specificity. Therefore, we must recommend no 2006 Spring Rise. Because of current low water levels in the main stem dams, there may not be enough water in 2006 to implement the spring rise program without endangering municipal water intakes sacred, cultural and historic resources. It is also clear that as reservoir levels recede, impacts and cost associated with cultural and historic resources will increase exponentially. While additional research and surveying is necessary to specify exact impacts on specific sites, it is incontrovertible that any reduction in elevation beyond existing levels will expose and damage a large number of sites on the National Historic Registry and sites eligible for the Registry.

The proposed 2006 spring rise is a federal undertaking, which would trigger Corps responsibility to comply with:

- Treaties and the Federal responsibility;
- Number of Federal Laws;
- Executive Orders;
- Memoranda of Agreement; and
- The 2004 Programmatic Agreement with the United States Army Corps of Engineers,

all of these authorities address protection and preservation of historic, sacred, cultural, and natural resources. See Appendix A for a brief explanation of the key provisions of the law.

Rights to Missouri River water are part of the treaty rights of Native American Tribes that historically were or are along the river. These rights are judicially established by the United State Supreme Court in the Winters Doctrine of 1908. In assuming management responsibility and control of Missouri River water, the Corps has assumed and acknowledges a trust responsibility for Multiple Tribal resources. As the Corps itself recognizes, **“The Federal Indian trust responsibility is a legally enforceable fiduciary obligation, on the part of the United States, to protect tribal lands, assets, resources, and treaty rights, as well as a duty to carry out the mandates of Federal law with respect to American Indian and Alaskan Native tribes.** In several cases discussing the trust responsibility, the Supreme Court has used language suggesting that it entails legal duties, moral obligations, and the fulfillment of understandings and expectations that have arisen over the entire course of dealings with the United States and the Tribes.”-Northwestern Division Native American Program Desk Guide p. 3.

The essence of a trust responsibility is that the tribal resources, must be manage for the benefit of the affected Tribes. The 2004 PA which was signed by many of the river tribes describes all laws, regulations, rules, executive orders, MOAs and protocols for which the Corps has compliance responsibility to protect sacred, cultural and historic resources whenever a proposed project or undertaking is being considered which has the potential to impact such resources. All of the protocols in the 2004 PA are predicated on the trust responsibility the CORPS has to the

Tribes on the Missouri River, a legal discussion of protocols which is included in appendix B in order to meet its trust responsibility to Tribes, the Corps must:

- A. Comply with provisions outlined in the 2004 PA;
- B. Ensure safe and easy access to the shoreline so as not to impede the continuity of ancient spiritual ceremonies, see appendix C for relevant provisions (Executive Order 13007 and American Indian Religious Freedom Act of 1978 (AIRFA));
- C. Ensure access for socioeconomic uses of Missouri River; and
- D. Plan for and provide adequate funding (including travel, consultation, and other needs) to ensure effective tribal participation in Missouri River restoration and recovery effort.

The protection of cultural and historic resources is a national issue. All cultural and historic resources, associated with the history of both tribal and non-tribal groups, require protection on all areas of the Missouri River, including the Missouri National Recreational River.

Fluctuating water levels in the reservoirs clearly have widespread and significant impacts to sacred, cultural and historic resources. See the preamble of the PA (appendix B) for critical information on the adverse effects such as, looting activities, degeneration of medicinal plants habitat, shoreline erosion, and water quality. As noted above, there is a distinct lack of useful data to make rational decisions about a spring rise. Further research, (Note: research parameters are determined through consultation pursuant to the 2004 PA), is clearly needed to accurately determined impacts to cultural and historic resources. This will be discussed in greater detail in section II, recommendations of this document.

SECTION II RECOMMENDATIONS

RECOMMENDATION 1: NO SPRING RISE FOR 2006.

Given current drought conditions and the lack of information available today, it is impossible to make a rational analysis of cultural and historic resource impacts of various Spring Rise proposals. Therefore, we must recommend no 2006 Spring Rise unless if there is sufficient precipitation to raise the reservoirs to acceptable levels that will be agreed upon by Indian Tribes, THPO's, SHPO's, and interested parties. If there is sufficient precipitation to maintain or increase existing water elevations on the Reservoirs, the Historical/Cultural and Burial Working Group can support a Spring Rise for 2006 with the following provisions:

- Full compliance with the 2004 PA and Trust responsibility to Affected Tribes, as discussed above. The Spring Rise is a Federal undertaking, which triggers pre-decisional consultation requirements with all affected Tribes in the PA.
- Stop protocols will be developed pursuant to existing Federal laws, such as NAGPRA which requires any projects to halt work in the event that a burial is exposed.
- Stop protocols developed both system-wide and by individual reservoirs, to protect municipal water intakes, for example a stop protocol for Lake Sakakawea would be 1816 MSL.
- No new exposures of submerged historic, cultural, and sacred resources. Looting (and attendant costs) increase exponentially with receding shorelines.
- Spring rise alternatives that have the least effect on reservoir pool levels are preferable for protection. Under increasing drought conditions, the amount of water released for a spring rise must be reduced accordingly.

RECOMMENDATION 2: Missouri National Recreation River (MNRR) provide a stage model based on cross section markers in the 39 mile and 59 mile stretches of the MNRR above and below Gavin's Point Dam.

- Will provide data on water levels at specific points on the river for various spring rise scenarios.
- Determine impacts to specific sacred, cultural, or historic sites.

RECOMMENDATION 3: Adequate monitoring, enforcement and in-situ protection of sacred, cultural and historic sites and human burials. Pursuant to the PA's consultation protocols, the affected tribes and other interested parties will develop a monitoring plan specific to a spring rise.

- Identify new, additional funding sources to implement this recommendation.

RECOMMENDATION 4: Site specific monitoring– The proposed spring rise may have adverse effects on specific locations that can be narrowly delineated. We suggest using aerial photographs taken before and after the spring rise to monitor the effects on these specific locations, for example:

- Extant sandbars in the MNRR should be monitored to determine the effect of the spring rise on the man-made sandbars. Future construction should be halted within the limits of the MNRR until it is determined whether the spring rise will damage the man-made sandbars or perhaps naturally create suitable habitat.
- The newly constructed Ft. Yates intake on the Standing Rock Sioux Reservation is directly downstream from a delta deposit. This deposit should be monitored to determine the effects of the spring rise. If the delta deposits are mobilized and endanger the intake, remedial steps will have to be taken.

RECOMMENDATION 5: Conduct new traditional cultural property and intensive archaeological surveys on all Omaha District Corps lands to create a useful database for rational analysis of impacts of a 2006 spring rise. Inventories should be conducted pursuant to 36 CFR Part 800. A Possible source of data for 2006 projections of reservoir elevations as this will determine effect of the spring rise. Include data from State, Federal sources, including THPO/SHPO, NPS and BIA.

RECOMMENDATION 6: Adverse effect to sacred, cultural and historic resources be avoided and/or mitigated through shoreline stabilization, the use of geo-textile fabric and other preservation methods prior to or caused by a spring rise.

RECOMMENDATION 7: A culturally based risk assessment must be conducted in consultation with affected Tribes and interested parties:

- To determine or assess risk and potential effects to sacred, cultural, historic, and human resources.
- This risk assessment must be developed in consultation, to include necessary funding needs, with affected Tribes and interested parties.

RECOMMENDATION 8: In order to develop rational, fact based analyses of impacts to sacred, cultural and historic resources, and to achieve consensus among affect Tribes, the work of the Historic/Burial working group should continue. This work would of course need to be adequately funded to ensure effective participation of all affected Tribes.

SECTION III – CLOSING STATEMENT

“Federal lands managed by the Corps (both within and outside reservation boundaries) include places that hold religious and cultural importance of the Tribes, and some of these places are crucial for the cultural identities of the Tribes and, as such, for the survival of the Tribes as distinct peoples. Some of these places contain the graves of ancestors and funerary objects, in which Federal law recognizes the right of lineal descendants and culturally affiliated Tribes to take custody in the event that they are removed from the Earth. The Tribes expect the Corps to treat these sacred and cultural significant places as subject to the Federal trust responsibility.”

2004 Programmatic Agreement with the
U.S. Army Corps of Engineers

Monitoring Plan Sacred, Historical, Cultural and Burial Sites

Introduction:

Because all manipulation of lake levels can potentially expose vulnerable sacred, historical, cultural and burial sites, effective monitoring is a necessary part of avoiding and minimizing adverse effects on sacred, historical, and cultural sites and human burials. Two types of monitoring are required:

1. To carry out on-going shoreline monitoring to discourage and apprehend looters; and
2. To evaluate impacts on particularly sensitive and/or endangered sacred, historical, cultural and burial sites.

Recommendations:

1. General Site/Shoreline Monitoring. According to the Programmatic Agreement (PA):

“13. Site Monitoring Program

A) Site Monitoring. The Corps shall develop and implement a monitoring program to provide continued oversight of historic properties located on federal land managed by the Corps and to collect information on site conditions and effects or threats to them (including but not limited to, erosion, recreational, agricultural and other encroachment, and looting and vandalism). The Corps shall use this information to plan and implement law enforcement and other preventive or corrective management actions.

B) Site Monitoring Plan. The Corps shall develop a Monitoring Plan to describe the conduct of the monitoring program. The Plan shall discuss the types and location of sites to be monitored, field methodology of monitoring and conditions recordation (including forms, data dictionary); data storage, retrieval and analysis; schedule; staffing and qualifications; and other details. The Corps shall produce a preliminary draft and then the Corps, Affected Tribes and THPOs, SHPOs, ACHP, and other consulting parties shall work together to develop a draft version of the Monitoring Plan, in accordance with stipulation 6. The Corps, in consultation with the Affected Tribes and THPOs, SHPOs, ACHP, and other consulting parties shall develop a final monitoring plan within 180 days of submission of comments on the draft Monitoring Plan. The Corps shall implement the final monitoring plan according to the schedule in the monitoring plan, CRMPs, and in response to recent information about potential threats to sites.” (2004 Programmatic Agreement, p. 11)

2. Site-Specific Monitoring.
 - a. The Corps should consult with affected Tribes to develop a plan for monitoring specific known sites that are particularly vulnerable to damage and/or exposure from wave action, changing lake levels, and other factors;
 - b. In many cases, Tribes may propose to contract with the Corps to carry out the day-to-day activities of identifying and monitoring sites; and
 - c. Adequate funding to carry out these plans must be projected and budgeted by the Corps in a timely manner.

APPENDIX A

2004 Programmatic Agreement

Appendix A

FINAL

**PROGRAMMATIC AGREEMENT
FOR THE
OPERATION AND MANAGEMENT OF THE
MISSOURI RIVER MAIN STEM SYSTEM
FOR COMPLIANCE WITH THE NATIONAL
HISTORIC PRESERVATION ACT, as amended**

MARCH 19, 2004

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**PROGRAMMATIC AGREEMENT
FOR THE OPERATION AND MANAGEMENT OF
THE MISSOURI RIVER MAIN STEM SYSTEM
FOR COMPLIANCE WITH
THE NATIONAL HISTORIC PRESERVATION ACT, as amended**

PREAMBLE¹

BACKGROUND

The Missouri River corridor is approximately 2,315 miles long. Over the course of thousands of years of occupation, Indigenous Peoples have established and maintained cultures and traditions that revolve around the natural resources of, and wildlife attracted by, the Missouri River ecosystem. This ecosystem and its well being continue to be crucial to the worship practices and life ways of contemporary Indigenous Peoples. There is a direct relationship between the environment, traditional worship practices, and the continued survival of diverse indigenous groups. Animals such as the buffalo, eagle, wolf, turtle, migratory and non-migratory birds, a variety of fish and aquatic plants and animals, as well as several species of trees, shrubs, and plants are central to traditional worship beliefs and practices. Within the Missouri River corridor, important natural springs exist which are sacred to Indigenous Peoples and have been considered so for thousands of years.

For Indigenous Tribal Peoples, the Missouri River is characterized as “The Water of Life” and the very water that created the corridor is considered sacred. When the Army Corps of Engineers built six main-stem dams on the Missouri River, life for the Indigenous Peoples who called the River home changed immediately and dramatically. Gone are many of our ancient, river-bottom homes, our medicines, our sacred places, the earthlodge and tipi village and hunting camp sites created by our beloved ancestors. Gone also are many places intrinsic to our origin stories and to events in our oral histories that are alive in our Peoples’ minds and hearts and in stories which are still related today. The loss of our river homes affected every aspect of the quality of our lives: spiritual, mental, physical, emotional, and socio-economic lifeways, all of which make up our very identity as Native Peoples. Altering the flow of the River altered the face of our Mother Earth, and we are still reeling from and dealing with the consequences of these man-made changes.

As a result of the creation of the Missouri River main stem and attendant dams, there are severe threats to many of the remaining sacred places and important resources that traditional Indigenous Cultures require for continuance. These threats include but are not limited to:

- Impacts caused by increasing development expanding out from urban areas (both on and off the water), which has historically been fueled by inadequate planning and management, as well as poor enforcement of applicable laws and regulations.
- The cultural resources, including traditional and sacred places, within the corridor are routinely raided and looted by pot hunters, at night and often from boats, and by ‘vacation archaeologists’ and pothunters who don’t acquire federally required permits.

¹ This Preamble was authored by the Tribes that consulted on this PA. It is not intended to and does not reflect the views of the U.S. Army, Corps of Engineers and may not reflect the views of the consulting parties.

- The waters of the lakes created by the Missouri River dams are constantly eroding the shoreline by ice in winter and wind generated waves in summer, or the raising and lowering of lake levels, in places removing shoreline by up to 30 or more feet per year. This erosion is not only an environmental problem, it also erodes indigenous tribal burial sites, ceremonial sites, and occupation sites. The eroding shoreline is causing the disappearance of many wild gathering and harvesting areas crucial to the continuance of traditional ways of life.
- An increasingly serious siltation problem is forming deltas at the mouths of all drainages flowing into the corridor caused by the lack of free flowing water in the corridor itself.
- The dams have adversely impacted the fish populations, as well as nesting birds, river otters, migratory birds, and many other animal species that relied on the natural rhythms of the river, which directly result in several species being identified as listed, threatened, or endangered. Studies have yet to be completed which identify plant (medicines) species that have been impacted by the dams.
- Investments of cooperative initiatives (Tribal, State and Federal) in the reintroduction of habitat along the riverbanks are seriously impacted by rapid erosion, even those plantings designed to slow or halt erosion.
- Increasing concentrations of chemicals and other pollutants are having an adverse impact on the use of water in all areas of life, including ceremonial activities.

For Indigenous Nations, Cultural Resources include animals, plants, and natural resources, as well as burial, occupation, prayer/worship, gathering, and gardening sites. Cultural Resources from the perspective of land-based worshippers also include important viewsheds, buttes, mountains, high ridges, and other natural formations that do not fit any Federal concepts or definitions. This has been problematic for Tribes and Tribal Peoples who see these resources holistically. In contrast, Federal and State law often segment these resources and assign their well being and management to diverse and, at times, competing Federal or State agencies. Under the National Historic Preservation Act (NHPA), an area that is inhabited by a unique community of plants or animals can be recognized as eligible for the National Register of Historic Places because of its ongoing importance for the culture of a living human community as a traditional cultural property (TCP), but in the implementation of the NHPA, much more attention has been given to sites that contain archaeologically important components. In addition, the importance of these relationships is subject to the interpretation of people and agencies that have no connection to either the archaeological/historic component or the plant/animal component and little understanding of their perceived sacredness by Indigenous Peoples.

This Programmatic Agreement is an attempt to address all problems associated with cultural and historic resource impacts involved with the ongoing operation and maintenance of the Missouri River system of main stem dams. It is by design an initiative that will facilitate the development of processes and strategies to minimize, avoid, or mitigate the ongoing adverse impacts the system causes. It is an attempt to overcome barriers keeping worshippers from areas and resources that are essential to their continuing ability to carry out traditional worship pursuits. Furthermore, through the collective establishment and implementation of principles of Consultation, and Collaboration, and Shared Stewardship, this document will lay the groundwork for Tribes to achieve parity with the Corps of Engineers on issues directly affecting important historic, cultural, and natural resources. Though this document is limited in its scope to the application and enforcement of historic preservation and protection laws, it provides

the opportunity to develop a dialogue and forum for the various Indigenous Nations and Federal agencies to begin addressing all resources considered sacred or important by Indigenous Peoples.

PARADIGM SHIFT

Historically, the Army Corps and the Tribes have experienced difficulties in addressing these issues in a manner that produces positive change and benefits for Tribes. It is time now to affect a shift in the paradigm that has driven the “management” of tribal sacred and cultural places; a substantial change is, in fact, long overdue. Since the 1970s, according to an Army Corps document issued during the Master Manual comment period, a total of \$1.9 million has been spent by the Omaha District Army Corps to stabilize shoreline for a total of 19 archaeological sites on the Missouri River. Recently, the Northwestern Division announced that \$3 million would be available annually to support the Cultural Resources Office of the Omaha District, all of which should be spent to stabilize the shoreline of the most endangered sacred and cultural places. Recently, the Army Corps staff issued a comprehensive list of the most endangered sites on the Missouri River, which comes with a price tag of \$77 million for shoreline stabilization. There is a tremendous disparity between available funds and what is still needed to preserve and protect our remaining cultural resources, and this disparity can only be addressed by an immediate and drastic change in the way our sacred places are cared for and maintained.

The Tribes expect the Corps to manage lands under its jurisdiction in a manner consistent with the Federal trust responsibility to Indian Tribes. The Corps acknowledges that the trust responsibility includes legal responsibilities and obligations to provide the highest standards of fiduciary care with respect to Federal and other activities that may affect the lands, other trust resources, and the exercise of the powers and rights of Indian nations.

All Corps actions, in the Missouri River Basin, directly or indirectly affect trust land, and some of the lands managed by the Corps are within reservation boundaries established by treaties where the Tribes and their members continue to have treaty-based rights even though lands have been taken out of trust status. Federal lands managed by the Corps (both within and outside reservation boundaries) include places that hold religious and cultural importance of the Tribes, and some of these places are crucial for the cultural identities of the Tribes and, as such, for the survival of the Tribes as distinct Peoples. Some of these places contain the graves of ancestors and funerary objects, in which Federal law recognizes the right of lineal descendants and culturally affiliated Tribes to take custody in the event that they are removed from the Earth. The Tribes expect the Corps to treat these sacred and cultural significant places as subject to the Federal trust responsibility.

This means that the Tribes must be engaged in consultation before decisions are made and that the Tribes expect to be equal participants in making decisions and in carrying out decisions. Consultation shall be both specific to individual Tribes and with as many comprehensive consultations attended by all affected Tribes as are necessary, with real efforts to reach consensus. Consultations shall be conducted in a positive manner, on a government-to-government basis, honoring all treaties and the trust doctrine which entail a fiduciary and fiscal responsibility of the Corps. Decisions will be made on a government-to-government basis. Finally, the Corps shall include, as consulting parties, affected Tribes in any review or update of the Master Manual.

The Tribes expect the Corps to exercise genuine stewardship with respect to places that hold religious and cultural importance for the Tribes and to share the stewardship of these special places with the Tribes. Whether this is called “shared stewardship” or “cooperative management” or some other term, the Tribes expect the relationship that develops between the Corps and the Tribes to be respectful and cooperative, with the ultimate objective of protecting these sacred and culturally importance places and assuring access for religious and cultural activities.

Finally, the Tribes anticipate that this shared stewardship document will ensure that our sacred and cultural places are regarded and understood from a native viewpoint with our values and customs applied to their protection, and not necessarily those of archaeology. For decades, the perceived archaeological value of our sacred places has been the only viewpoint considered, and that method of assigning value to our holy places has contributed to a recipe for their destruction: mix equal parts erosion, neglect and development; let this mixture ‘rest’ for fifty years, add a measure of ‘salvage archaeology,’ destroying the sites to extract data; let the rest fall into the water. And you have a meal that is unfit to eat for Native peoples, a meal which we have been force-fed since the 1930’s, when construction of the first dam near the Ft. Peck Reservation was begun.

The Tribes expect that in the new paradigm, the fundamental value will be respect: respect for the River and for our sacred and cultural places; respect for our values, our culture, our beliefs; respect for Native Peoples and our contributions to the upper Missouri River environment; as well as respect for the tremendous sacrifices we made so that newcomers to our homelands could have flood control and electricity. We want to be taken seriously when we talk about our cultures, our needs, and our issues—and we want to be taken as seriously as archeologists are when they talk about our ancestors, our cultures, and our interests. And that is the second half of the paradigm shift our Nations are all working toward: to bring our interests and issues, articulated from our value system and from our point of view, to a ‘key issue’ priority level with the Omaha District of the Army Corps so that they receive the same attention and resources as other issues for which the Corps has responsibility. We know that what we want is not unreasonable. We also know that the Programmatic Agreement holds great potential to improve relations between the Missouri River Tribes and the Army Corps, and can be the tool we use to create a success story of which we can all be proud.

**PROGRAMMATIC AGREEMENT
FOR THE
OPERATION AND MANAGEMENT OF THE MISSOURI RIVER
MAIN STEM SYSTEM
FOR
COMPLIANCE WITH THE NATIONAL HISTORIC PRESERVATION ACT**

WHEREAS, the Omaha District and the Northwestern Division of the U.S. Army Corps of Engineers, (hereinafter the Corps) operate and manage the integrated system of multi-purpose reservoir projects and associated structures and lands on the Main Stem of the Missouri River for flood control, navigation, irrigation, municipal and industrial use, recreation, fish and wildlife protection, and other purposes as authorized by the Flood Control Act of 1944 (P.L. 78-543, as amended) and other relevant authorities; and

WHEREAS, the Corps' authorized operation and management of impounded waters of the Main Stem System results in adverse effects to properties included in or eligible for the National Register of Historic Places (hereinafter, historic properties) through inundation, erosion, exposure, and other factors; and

WHEREAS, the Corps' authorized management of project lands that are not routinely inundated or periodically inundated, including land-based support facilities for water control, facilities and measures for recreation, general public use, access, and the enhancement of the environment, fish and wildlife, and other authorized purposes may result in direct and indirect effects to historic properties such as damage or destruction from construction, burning, erosion, sedimentation, theft, looting, vandalism, and other factors; and

WHEREAS, the Corps is responsible for complying with the National Historic Preservation Act, as amended (hereinafter, NHPA) (P.L. 89-665, as amended; 16 U.S.C. 470f), including Section 110 that requires federal agencies 1) to establish a program to preserve, protect, identify, evaluate, and nominate historic properties under their jurisdiction or control (including traditional cultural properties (TCPs) and historic properties to which Tribes attach religious and cultural significance) in consultation with others and 2) to give full consideration to the preservation of historic properties not under their jurisdiction or control but affected by federal agency undertakings; and

WHEREAS, the Corps' Main Stem System operations and management actions meet the definition of undertakings for the purposes of Section 106 of the NHPA (16 U.S.C. 470f) (hereinafter Section 106) and, therefore, the Corps is responsible for complying with Section 106 for these actions; and

WHEREAS, in compliance with Section 106, the Corps, Indian Tribes (hereinafter Affected Tribes), Tribal Historic Preservation Officers (hereinafter, THPOs) and State Historic Preservation Officers (hereinafter, SHPOs), the Advisory Council on Historic Preservation (hereinafter, ACHP) and other consulting parties have developed and the Corps will implement this Programmatic Agreement (PA) in accordance with 36 CFR Section 800.14(b) for certain of the Corps' operation and management actions as outlined in this PA; and

STIPULATIONS

Final Programmatic Agreement
March 19, 2004

WHEREAS, the Corps is required by Section 101(d)(6) of the NHPA to consult with any Indian tribe that attaches religious and cultural significance to historic properties that may be affected by a proposed federal undertaking subject to Section 106; and

WHEREAS, the United States Department of Defense recognizes its trust responsibilities to federally recognized Indian Tribes and has established an American Indian and Native Alaskan Trust policy that directs Department of Defense agencies, including the U.S Army Corps of Engineers, to work with Tribes in a manner that incorporates tribal needs, traditional resources, stewardship practices, and the development of viable working relationships; and

WHEREAS, the ACHP recognizes its trust responsibility to federally recognized Tribes and has described this trust responsibility in its, "ACHP Policy Statement Regarding ACHPs Relationship with Indian Tribes", issued November 17, 2000 and updated on April 4, 2003; and

WHEREAS, the Corps recognizes that sacred and cultural resources, many of which are historic properties, are critically important to the Affected Tribes for the continuity and revitalization of cultural and spiritual life-ways, making avoidance of adverse effects to these resources and the preservation of remaining sacred and cultural places a matter of the highest priority regardless of their eligibility to the National Register of Historic Places; and

WHEREAS, in addition to the NHPA, the Corps is responsible for compliance with other applicable legal authorities outlined in Attachment 1 to this PA that may overlap with or be supportive of the goals and purview of the NHPA and,

WHEREAS, the Corps has provided the opportunity to consult on the development of and to become a signatory to this PA to the ACHP; SHPOs of Montana, North Dakota, South Dakota, and Nebraska; Standing Rock Sioux Tribe and its Tribal Historic Preservation Officer (THPO); Cheyenne River Sioux Tribe and its THPO; Santee Sioux Tribe; Yankton Sioux Tribe; Crow Creek Sioux Tribe; Lower Brule Sioux Indian Tribe; Three Affiliated Tribes; the Assiniboine and Sioux Tribe of Fort Peck; Turtle Mountain Band of the Chippewa Tribe and its THPO; Blackfeet Tribe; Chippewa Cree Tribe; Crow Nation; Flandreau Santee Sioux Tribe; Gros Ventre and Assiniboine Tribe; Northern Arapaho Tribe; Northern Cheyenne Tribe; Oglala Sioux Tribe; Omaha Tribe of Nebraska; Ponca Tribe of Nebraska; Rosebud Sioux Tribe; Sisseton-Wahpeton Sioux Tribe; Spirit Lake Sioux Tribe; Sac and Fox of Missouri in Kansas and Nebraska; South Dakota Department of Game Fish and Parks (SDGFP); Bureau of Indian Affairs (BIA); and the National Trust for Historic Preservation (NTHP) (hereinafter consulting parties).

NOW, THEREFORE, the above parties agree that the Missouri River Main Stem System shall be administered in accordance with the following stipulations to avoid, minimize, or mitigate adverse effects and satisfy the Corps' Section 106 responsibilities for those actions outlined within this PA.

STIPULATIONS

The Corps shall ensure the following measures are implemented:

1. Definitions.

The list of definitions used in this Programmatic Agreement is provided in Attachment 2.

2. 1993 Programmatic Agreement

The Programmatic Agreement for the Missouri River Main Stem System previously executed by the ACHP, Corps and SHPOs from Nebraska, South Dakota, North Dakota and Montana on October 18, 1993 is null and void.

3. Scope of this Programmatic Agreement

A) The geographical scope of this PA, based on the Corps' concept of the Area of Potential Effects, is as follows:

- i) federal lands, owned by the Corps, beginning at the headwaters of Fort Peck Lake, approximately 3 miles northwest of the Fred Robinson Bridge, Phillips County, Montana to Gavins Point Dam, Yankton County, South Dakota, including but not limited to Fort Peck Lake and Fort Peck Dam; Lake Sakakawea and Garrison Dam; Lake Oahe and Oahe Dam; Lake Sharpe and Big Bend Dam; Lake Francis Case and Fort Randall Dam; and Lewis and Clark Lake and Gavins Point Dam with project lands and related structures, generally known as the Missouri River Main Stem System; and
- ii) areas downstream of and adjacent to the six Main Stem dams (which are affected by the operation of the system) are within the geographical scope of this PA, even though these areas are not under the authority or ownership of the Corps and may not be in federal ownership. It is recognized that the Corps has restrictions on its use of Main Stem operations monies and other authorities on non-Corps lands.

B) The Corps shall comply with Section 106 in accordance with 36 CFR part 800 for the following activities:

- i) Projects, activities, policies by or authorized by the state of South Dakota and/or the Corps on so-called Title VI lands, e.g., lands transferred to the SDGFP pursuant to Title VI of the Water Resources Development Act of 1999, as amended (Title VI hereinafter), as the Corps will begin consultation on the development and implementation of a separate PA for these actions in accordance with 36 CFR Section 800.14(b) by December 2004.
- ii) Corps lands or exchanges, including those pursuant to Title VI;
- iii) Corps regulatory actions pursuant to Section 404 of the Clean Water Act.

4. Relationship to Treaties, Statutes, Regulations, Executive Orders, Court Orders, and Other Authorities

A) In general, nothing in this PA diminishes or affects any treaty right of an Indian tribe, any water right of an Indian tribe, or any other right of an Indian Tribe, any external boundary of an Indian reservation of an Indian Tribe; any authority of the States that are a party to this PA; any authority of the Corps or the head of any other federal agency under a law in effect on the date of signing of this PA; any treaty or water right, or any other right of an entity that is not a party to the PA.

B) No provision of this section or of the PA shall limit any right of an Affected Tribe or other consulting party to bring an action against the Corps or any other party once final agency action is complete; shall alter existing law regarding the sovereign immunity of the Tribes, the other consulting parties, or the Corps, or any other entity that is not a part of this PA; or shall be construed to alter existing law regarding the trust duty of the United States or the Corps to the Tribes (either to limit or expand that trust duty).

C) All court orders, including settlement agreements (present and future), shall be implemented and their terms be incorporated into documents and measures or revisions to them called for in this PA. In any case of difference or ambiguity, a court order shall take precedence over the terms of this PA.

5. Programmatic Agreement Coordination.

A) Designated PA Representative(s). Within 60 days of signing this PA, each Affected Tribe and THPO, ACHP, SHPO, and other consulting party shall designate a point of contact for carrying out this PA (hereinafter, PA representative). If more than one person is designated as PA representatives, the party also shall indicate the responsibilities of each such person for carrying out this PA.

B) Government/Personnel Changes. Affected Tribes and THPOs, SHPOs, ACHP, and other consulting parties shall provide timely written notification to the Corps and the other parties to this PA of changes in their tribal or agency leadership (tribal Chairman or President; head of agency, etc.), persons holding cultural and historic preservation positions, and PA representatives.

6. Consultation.

All consultation and coordination required under this PA shall be conducted in accordance with the following:

A) General. The Corps shall plan consultations to coordinate with the requirements of all applicable statutes and executive orders. Affected Tribes and THPOs, SHPOs, ACHP and other consulting parties shall be provided the opportunity to participate in the development and implementation of agreements, management plans, and activities developed or required under this PA. The Corps, Affected Tribes and THPOs, SHPOs, and other consulting parties shall facilitate and cooperate in the consultation process toward the mutual goal of information sharing and promotion of respect.

B) Review and Response Requirements. Unless otherwise provided for in this PA, the Corps shall afford the Affected Tribes and THPOs, SHPOs, ACHP, and other consulting parties no less than 30 calendar days from receipt of a complete consultation request to respond to a Corps communication required under this PA. A complete consultation request shall include information that the party determines is needed to make an informed decision on the matter. Should any Affected Tribe or THPO, SHPO, or other consulting party not respond within this time limit or other limit specified elsewhere in the PA, the Corps will document in its records when consultation was requested and the non-response. Unless an Affected Tribe or THPO, SHPO, or other consulting party responds in writing that it does not wish to consult at all on the proposed undertaking or matter, the Corps shall assume that the party wishes to continue consulting on subsequent requests related to that initial undertaking or matter. Failure to respond will not be construed as either concurrence or non-concurrence.

C) Pre-Consultation Actions. To promote effective and meaningful consultation, the Corps shall notify the Affected Tribes and THPOs, SHPOs, ACHP, and other consulting parties of the need to consult on the various matters called for in this PA as soon as possible and pre-decisionally as follows:

- i) provide a notification letter with information about the proposed undertaking or matter to each PA representative, with a copy to the head of the agency or tribal government, as early as possible and prior to making any decisions about the proposed undertaking or matter;
- ii) follow-up via telephone with the PA representative after distributing the notification letter to establish a person-to-person contact;
- iii) provide further information as the PA representative may need for informed input and judgment;
- iv) provide draft agendas, request input from the PA representative, and finalize the agenda based on this input;
- v) coordinate consultation for this PA with consultation requirements for other legal bases to the extent possible and inform the PA representative of all pertinent legal bases for consultation.

D) Consultation Guidelines. For meaningful and effective consultation with the Affected Tribes and THPOs, SHPOs, ACHP, and other consulting parties, the Corps shall

- i) Listen carefully before any decisions are made so as to understand the needs and perspectives of the Affected Tribes and THPOs, SHPOs, ACHP, and other consulting parties;
- ii) Work as equal partners with the Affected Tribes and THPOs, SHPOs, ACHP, and other consulting parties to consider and devise means to identify and preserve cultural resource sites and avoid effects to them, consistent with tribal viewpoints and values. If avoidance is not possible, the Corps shall work with the Affected Tribes and THPOs, SHPOs, ACHP, and other consulting parties as equal partners to minimize effects to such sites to the greatest extent possible;
- iii) Provide all pertinent documents and other information, consistent with Federal law, to the Affected Tribes and THPOs, SHPOs, ACHP,

and other consulting parties to enable fully informed decisions and meaningful consultation;

iv) Plan consultations jointly with the Affected Tribes and THPOs, SHPOs, ACHP, and other consulting parties, including meetings (when and where), conference calls, agendas based on requested input from all involved.

v) Engage in consultation to discuss, dialogue, and make agreements, and do so through face-to-face consultation meetings to the greatest extent possible;

vi) Make and provide written accurate records of all consultations and make copies available to Affected Tribes and THPOs, SHPOs, ACHP and other consulting parties within 30 days of the consultation. Written verbatim records will be made utilizing a court reporter, on a case-by-case basis when requested by a signatory for a face-to-face consultation. When requested by a signatory, verbatim records of telephone conference calls may be made by using a tape recorder, and copies of the tape provided to the requesting signatory. Affected Tribes and THPOs, SHPOs, ACHP and other consulting parties shall have the opportunity to review, offer corrections, and add alternative views to the record;

vii) the federal agencies, affected tribes, THPOs, SHPOs, and other consulting parties shall facilitate and cooperate in the consultation process toward the mutual goal of information sharing, promotion, and respect for the unique relationship of each party and the trust doctrine and trust responsibility of the federal parties.

E) Input from Tribal Elders. An Affected Tribe or THPO, SHPO, or other consulting party may respond to a request by informing the Corps that special efforts should be made to seek input from tribal elders and other persons with traditional and cultural knowledge. If the Corps is so notified or if persons with traditional or cultural knowledge notify the Corps that they wish to be consulted regarding a matter, the Corps shall consult with the Tribe and/or THPO regarding appropriate ways to seek input from such persons, and the Corps shall seek such input. Efforts may include (but need not be limited to) conducting special meetings, scheduling meetings at locations to reduce the need for such persons to travel, ensuring that translation services are available, and adjusting the schedule to accommodate input from such persons.

F) Protocol Agreements. The Corps recognizes that an Affected Tribe, THPO, SHPO, or other consulting party may have particular issues of concern, ways of conducting business, or protocols that should be considered during consultations. When requested by an officially designated representative or PA representative, the Corps and that party shall cooperatively develop a Protocol Agreement (PRAG) to document that agreed-upon protocol. A PRAG shall be supplemental to the general procedure(s) in this PA and not modify the roles of other parties to this PA without their prior written consent.

G) Efficient Consultations. The Corps and the Affected Tribes and THPOs, SHPOs, ACHP, and other consulting parties shall work together to develop ways to communicate and transmit information in an effective yet efficient manner. Possible means include (but are not limited to) development of a secure website to which the Affected Tribes and THPOs, SHPOs, ACHP and other consulting

parties have access, electronic transmission of documents, and/or an email broadcast system.

7. Non-National Historic Preservation Act Commitments.

In consultation with the Affected Tribes and THPOs, the Corps agrees to carry out the actions outlined in Attachment 3 of this PA, all of which are beyond the requirements of the NHPA and the authority of the ACHP and are under the authority of the laws and legal requirements cited therein.

8. Undertakings Review Provisions; Tribal or SHPO Non-Signature, Withdrawal, or Termination; and Exempt Undertakings.

A) Undertakings Review. For Corps undertakings that are planned or anticipated (for example, but not limited to, recreational and other development, silt or sediment removal, habitat creation or restoration, etc.), the Corps shall consult on and address effects to historic properties through the Five-Year Plan, CRMPs, and attendant Treatment Plans as outlined in stipulations 6, 8, 9, and 11 and the other provisions of this PA. However, for those planned or anticipated undertakings not addressed through the Five-Year Plan, CRMPs, and Treatment Plans, the Corps shall comply with section 106, NHPA in accordance with 36 CFR part 800, subpart B. For Main Stem System operations and their indirect adverse effects (including, but not limited to, erosion, exposure, susceptibility to looting or vandalism, etc.), the Corps shall consult regarding and address such effects to historic properties through the terms of this PA.

B) Tribal or SHPO Non-Signature, Withdrawal, or Termination. The Corps shall comply with Section 106 in accordance with 36 CFR part 800, subpart B for Corps undertakings that may affect lands, or historic properties, many of which are cultural resources sacred to Tribes, located within the exterior boundaries of an Indian reservation, including Corps lands, if that tribe is not a signatory to this PA or if that tribe has withdrawn from this PA or terminated this PA on its tribal lands (refer to Stipulation 4). Similarly, the Corps shall comply with 36 CFR part 800, subpart B for actions or undertakings within a SHPO's area of jurisdiction, if that SHPO has withdrawn from this PA or terminated this PA within its area of jurisdiction.

C) Exempt Undertakings. The Corps, Affected Tribes and THPOs, SHPOs, ACHP, and other consulting parties shall consult to determine if there are certain types of undertakings and actions that should be exempted from review and consultation under this PA because they have little or no potential to affect historic properties. In consulting on this list of exempt undertakings and actions, the Corps shall follow the consultation provisions of stipulation 6 of this PA. The exempt actions and undertakings in such a list shall not go into effect until agreed to, in writing, by the Corps, tribal signatories, SHPOs, and ACHP. The resulting list of exempt undertakings shall be provided to all Affected Tribes and THPOs, SHPOs, ACHP, and other consulting parties as an amendment to this PA.

9. Main Stem Reservoir Cultural Resource Management Plans.

A) Status. The Corps has completed the Lewis and Clark Lake, Lake Sharpe and Lake Francis Case Cultural Resources Management Plans (CRMP), and is in the process of completing the Lake Oahe, Fort Peck Lake and Lake Sakakawea CRMPs. The Corps shall ensure that CRMPs for all Main Stem reservoirs are completed by May 2005 and are developed in consultation with the Affected Tribes and THPOs, SHPOs, ACHP and other consulting parties to this PA.

B) Requirements. The CRMPs will partially fulfill the requirements of the NHPA, this PA, and the requirements of Engineer Regulation 1130-2-540. The CRMPs will provide baseline information about cultural resource sites (including historic properties) at each reservoir and a list of actions to address the goals, objective, and program areas set forth in the Five-Year Plan. The CRMPs will utilize the Lake Sharpe CRMP as a template or any revision to that template developed in consultation with the Affected Tribes, THPOs, SHPOs, ACHP, and other consulting parties. Recommended actions (i.e., TCP surveys, archeological surveys, testing and evaluations, etc.) from CRMP shall be completed in accordance with applicable federal laws governing such actions.

C) Review. The Corps and the Affected Tribes and THPOs, SHPOs, ACHP and other consulting parties shall work together to develop and implement a process by which the Affected Tribes and THPOs, SHPOs, ACHP and other consulting parties will be involved in the development and review of draft and final CRMPs and updates to them. Until completion of this process, drafts of the CRMPs and updates of them shall be provided for review and consultation according to the procedures outlined in stipulation 6, except that parties shall have no less than 60 days for review and comment. To facilitate review, the Corps shall provide Affected Tribes and THPOs, SHPOs, ACHP and other consulting parties with related historic property and management information, such as future management actions, needs, and policies; project maps and information showing historic properties, management/use areas, cultural resources survey coverage, leased areas, recreation areas, boundaries of Corps lands, Title VI lands, and so forth. The Corps shall incorporate comments from the Affected Tribes and THPOs, SHPOs, ACHP and other consulting parties in finalizing the draft or final CRMPs. After review and comment by the appropriate Affected Tribes and THPOs, SHPOs, ACHP and other consulting parties, the Corps shall ensure that the CRMPs are finalized and implemented.

D) Revision. The Corps agrees to update the completed CRMPs every two years. The intent is to monitor progress, incorporate new information, correct information, and allow for additional input into the implementation of the cultural resources program at the reservoir for which the CRMP is written. The review process outlined in stipulation 9.C., above will be used for revising CRMPs.

10. Five-Year Cultural Resources Implementation Plan.

The Corps, working cooperatively and in consultation with the Affected Tribes and THPOs, SHPOs, ACHP and other consulting parties, shall develop and carry out a plan that outlines how the Corps will conduct its Main Stem System Cultural Resources Program and its various program components individually called for in this PA for the coming five years (hereinafter, Five-Year Plan) and following five year periods

thereafter. The intent of the Corps is to incorporate the final Five-Year Plan into the Corps' Strategic Plan.

A) The Five-Year Plan shall describe the following:

- i) actions to identify Mainstem System cultural resource sites (including historic properties) and evaluate them for the National Register of Historic Places that may be affected by Corps undertakings and operations of the Main Stem System and to comply with Section 110, NHPA. Acreage estimates and locations, prioritization of these locations, and tasks (e.g., oral histories, documentary research, etc.) should be described. (See also stipulation 11);
- ii) Corps management and operational actions that may adversely affect historic properties (for example, operations, recreational development, habitat restoration/creation, susceptibility to erosion, looting and vandalism, etc.) and their locations; and
- iii) actions to avoid, minimize, or mitigate adverse effects on historic properties, including identification of specific sites and proposed treatment (subject to consultation with Affected Tribes and THPOs, SHPOs, ACHP, and other consulting parties). (See also stipulation 11);
- iv) actions to address potential effects of Corps operations to historic properties located off Corps lands in compliance with Section 110(a)(2)(c), NHPA, recognizing that the Corps may need to seek alternative funding approaches, special authorizations, appropriations, and/or resolution of property permission issues. (See also stipulation 11);
- v) actions to address unexpected discoveries of historic properties or unexpected effects to known historic properties. (See also stipulation 11);
- vi) actions for the management, analysis, and sharing of cultural resource data, including development of protocol to protect sensitive information (See also stipulations 10 and 17);
- vii) actions to support the cultural resources law enforcement program. (See also stipulation 14);
- viii) actions to monitor cultural resources sites, how site-monitoring information will be used for management purposes, and sites selected to be monitored. (See also stipulation 13);
- ix) actions to develop and update CRMPs, Five-Year Plans, and Annual Reports. (See also stipulations 9, 10, 22);
- x) actions to promote public education and interpretive initiatives and the use of historic properties. (See also stipulation 15); and

xi) other actions and program needs that the Affected Tribes or THPOs, SHPOs, ACHP, or other consulting parties have requested in the Five-Year Plan.

B) Development, Review, and Revision of Five-Year Plan. Within 180 days of the execution of this PA, the Corps shall provide a preliminary draft version of the Five-Year Plan to the Affected Tribes and THPOs, SHPOs, ACHP, and other consulting parties. Then, the Corps and these parties shall work together as outlined in stipulation 6 to develop a draft version of the Five-Year Plan for review. The Corps, in consultation with the Affected Tribes and THPOs, SHPOs, ACHP, and other consulting parties, shall develop a final Five-Year Plan within 120 days of submission of comments on the draft Five-Year Plan. The Affected Tribes and THPOs, SHPOs, ACHP, and other consulting parties shall be given a 60-day review and comment period for each version. The Corps shall incorporate comments received in developing, finalizing, and implementing the Five-Year Plan. Every five years, the Corps shall revise and update the Five-Year Plan using this same development, review, and consultation procedure.

11. Identification of Historic Properties.

A) Identification Activities. The Corps shall identify historic properties (including historic properties to which an Affected Tribe attaches religious and cultural significance, traditional cultural properties (TCPs), and other types of cultural resources), in compliance with Section 110 of the NHPA and the Corps' ER and EP 1130-2-540. Additionally, the Corps shall ensure that historic properties are identified prior to making decisions about undertakings, following the review process outlined in stipulation 8.A. Identification methods to be used include (but are not limited to) pedestrian surveys and other field investigations; background and documentary research; oral histories; tribal consultation and consultation with tribal elders; and other means. The Corps shall evaluate whether properties are eligible for the National Register of Historic Places using the eligibility criteria and National Park Service guidance (including Bulletin 38), in consultation with the SHPO and/or THPO with jurisdiction and Affected Tribes that may attach religious and cultural significance.

B) Location and Recordation of Sites. The Corps shall locate sites by global positioning system (GPS), complete site visit forms, and add site information to the Corps cultural resources site GIS system. Additionally, the condition and threats to sites will be recorded through the site-monitoring program and added to the GIS system. All site identification and monitoring information shall be included in next update of the applicable CRMP.

C) Sharing of Data. Within 120 days of the execution this PA and regularly thereafter, the Corps shall provide existing and updated cultural resource site information in accepted formats or access to the Corps' cultural resources site GIS system to federal, state, and tribal offices charged with maintaining such information.

D) Traditional Cultural Property (TCP) Surveys. The Corps shall ensure that surveys and related efforts (e.g., oral history, etc.) for TCPs and other historic properties to which Affected Tribes may attach religious and cultural or

other significance are carried out for project areas identified in the CRMPs and Five-Year Plan. The results of the surveys and other efforts shall be documented using National Park Service Bulletin 38, as well as other pertinent tribal and state requirements, with sensitive information protected pursuant to stipulation 17.

12. Measures to Avoid, Minimize, or Mitigate Adverse Effects to Historic Properties.

Prior to carrying out measures to avoid, minimize, or mitigate adverse effects to a historic property as set forth in the Five-Year Plan and CRMPs, the Corps shall provide a draft Treatment Plan to the Affected Tribes and THPOs, SHPOs, ACHP, and other consulting parties for review and consultation as outlined in stipulation 6. Alternatively, a draft Treatment Plan may be included in a draft CRMP or draft Five-Year Plan and be reviewed as part of those draft documents. The draft Treatment Plans shall describe the historic property and the adverse effects to it, alternatives measures considered, treatment proposed and why it was chosen, details of how treatment will be implemented, schedule and cost of proposed treatment, and how the treatment meets the pertinent standards and guidelines of the *Secretary of the Interior's Standards and Guidelines for Historic Preservation Projects*, and applicable state and tribal requirements.

13. Site Monitoring Program

A) Site Monitoring. The Corps shall develop and implement a monitoring program to provide continued oversight of historic properties located on federal land managed by the Corps and to collect information on site conditions and effects or threats to them (including but not limited to, erosion, recreational, agricultural and other encroachment, and looting and vandalism). The Corps shall use this information to plan and implement law enforcement and other preventive or corrective management actions.

B) Site Monitoring Plan. The Corps shall develop a Monitoring Plan to describe the conduct of the monitoring program. The Plan shall discuss the types and location of sites to be monitored, field methodology of monitoring and conditions recordation (including forms, data dictionary); data storage, retrieval and analysis; schedule; staffing and qualifications; and other details. The Corps shall produce a preliminary draft and then the Corps, Affected Tribes and THPOs, SHPOs, ACHP, and other consulting parties shall work together to develop a draft version of the Monitoring Plan, in accordance with stipulation 6. The Corps, in consultation with the Affected Tribes and THPOs, SHPOs, ACHP, and other consulting parties shall develop a final monitoring plan within 180 days of submission of comments on the draft Monitoring Plan. The Corps shall implement the final monitoring plan according to the schedule in the monitoring plan, CRMPs, and in response to recent information about potential threats to sites.

14. Enforcement Program.

A) Enforcement Memorandum of Agreement(s) (MOA(s)).

The Corps, in cooperation with the local, state, tribal and federal law enforcement officials, shall develop an Enforcement MOA(s) that provides for a cultural resources enforcement program to address looting, vandalism, and other

illegal activity involving cultural resource sites, including TCPs, archeological resources, graves, and human remains. Specifically, the Enforcement MOA(s) shall address laws, authorities, potential cross-authorities, delegations and deputization of authorities, fine distribution, field deployment, access, sharing of equipment, public education, information reporting, gathering and exchange, and other issues. The Corps shall provide a draft Enforcement MOA for review to all interested parties, including law enforcement officials and Affected Tribes, THPOs, SHPOs, ACHP, and other consulting parties, within 60 days of the signing of this PA. The Corps shall work with the interested parties to revise the draft Enforcement MOA to address their comments. The Enforcement MOA shall be finalized only after the consultation process has been completed as stated in stipulation 6.

B) Hotline. Within 120 days of the signing of this PA, the Corps shall establish and promote a hotline for reporting of looting, vandalism, and other illegal activities and a specific protocol for documentation, verification, and tracking of information, for the purpose of prosecution of offenders.

C) ARPA Training. Every three years the Corps shall host an ARPA training class for law enforcement, cultural preservation personnel (tribal, state and federal), and others who may be involved in enforcement activities.

15. Cultural Resource Education Program.

A) Educational Program. Engineer Regulation No. 1130-2-540 authorizes the preparation of brochures, slide shows, or other media documentation for public presentation relative to historic preservation activities that may be of particular interest to the Affected Tribes and general public.

- i) The Corps shall create educational displays, media shows, interpretive programs, pamphlets, and brochures to enhance public education concerning cultural resources. The parties to this PA will be involved in the development and finalization of these items. The Five-Year Plan and CRMPs will describe how the Corps will carry out this educational and interpretive program.
- ii) The Corps, in consultation with the Affected Tribes and THPOs, SHPOs, and as outlined in the CRMPs and Five-Year Plan, will develop an educational program concerning the need to avoid cultural areas and to leave archaeological sites and their material remains undisturbed. The public is generally uninformed about the significance of cultural resources and unaware of the significance of these cultural areas or sites for Affected Tribes whose ancestors lived in these areas and created what are often referred to as archaeological sites.

B) Signage. The public must be made aware that cultural sites are being monitored for unauthorized activities and severe criminal penalties could result from illegal activity of looting, artifact collecting, and vandalism. The Corps, in consultation with Affected Tribes and THPOs, SHPOs, ACHP, and other consulting parties, shall develop and place signs at agreed upon points of public access to the Missouri River.

C) Press Release. In consultation with Affected Tribes and THPOs and SHPOs, the Corps shall issue press releases and conduct press conferences bi-annually (Spring and Fall) to remind the public about the penalties associated with looting, artifact collecting, and vandalizing. A list of local, regional, and multi-state media will be developed in consultation with Affected Tribes and THPOs, and SHPOs.

16. Curation of Artifact Collections, Material, Records, and Data.

The Corps shall ensure that artifacts are collected on a minimal basis only in those situations that require the collection to support a requirement of the NHPA.

The Corps shall curate artifact collections, material, records, and data according to 36 CFR Part 79.1-Curation of Federally-owned and Administered Archeological Collections and Corps Engineer Regulation 1130-2-433, except that resources meeting NAGPRA definitions will be handled according to the requirements and procedures in the NAGPRA regulations or other memoranda of agreement entered into between the Corps and tribal governments. The Corps shall curate paleontology resources as addressed in Attachment 3. The Corps will continue to carry out its current practice of reburying artifacts on or near the area where they were found during monitoring or other field actions, and their discovery and subsequent reburial will be reported to the Affected Tribes

17. Protection of Sensitive Information.

A) Legal Background. Section 9 of ARPA provides for information concerning the nature and location of archaeological resources on federal land and Indian land to be protected from disclosure under the Freedom of Information Act (FOIA), unless excepted under ARPA. Section 304, NHPA provides that information about the location, character, or ownership of a historic property shall be withheld from disclosure under FOIA if the Corps, in consultation with the National Park Service, determines that disclosure may 1) cause a significant invasion of privacy; 2) risk harm to the historic resource; or 3) impede the use of a traditional religious site by practitioners. The Corps, to the maximum degree possible, shall respect section 9 of ARPA and section 304 of the NHPA in determining *the* release or disclosure of information under FOIA. For the purposes of protection of sensitive information, the Corps shall consider properties or locations that have not been evaluated for their National Register eligibility, including TCPs and properties of religious and cultural significance, as eligible for the National Register in making this determination.

B) Confidentiality Protocol. The Corps and Affected Tribes, THPOs, SHPOs, ACHP, and other consulting parties recognize the need to treat certain kinds of sensitive or proprietary information with confidentiality, including but not limited to information about the location of places that hold sacred significance for Affected Tribes and THPOs. The Corps and Affected Tribes, THPOs, SHPOs, ACHP, and other consulting parties shall, working in close consultation as outlined in stipulation 6, and assuring compliance with Federal and other applicable law, develop a protocol for the confidentiality of such sensitive information within one-year of signing of this document.

C) Interim Confidentiality Provisions. Until such a protocol is adopted, the Corps and Affected Tribes, THPOs, SHPOs, ACHP, and other consulting parties shall protect information concerning the nature, character, ownership, or location of archaeological resources or historic properties and withhold such information from disclosure to the public as outlined in subsection A) above of this stipulation. Also, the Corps shall ensure that each document that includes information about any historic property, archaeological resource, or unevaluated location shall be accompanied with a prominent notice that the document and information are to be treated for official use only.

18. Corps Main Stem System Operations Decision Documents.

The Corps shall consult with Affected Tribes and THPOs, SHPOs, ACHP, and the other consulting parties on draft Annual Operating Plans and other decision documents to determine whether operational changes are likely to cause changes to the nature, location, or severity of adverse effects to historic properties or to the types of historic properties affected and whether amendments to the Corps' CRMP(s) and Five-Year Plan are warranted in order to better address such effects to historic properties.

19. Tribal Partnerships.

The Corps and the Affected Tribes, THPOs, SHPOs, ACHP shall work together to develop and implement partnerships so that Affected Tribes, THPOs, SHPOs, ACHP are involved in the development and implementation of the Main Stem System cultural resources program and this PA and that promote tribal historic preservation goals. Training, access to cultural resource site information (subject to provisions for protection of such information), historic preservation services, sharing of and/of access to equipment, etc. may be the basis of such partnerships. It is acknowledged that some or all these partnerships may need to be supported by cooperative agreements or other instruments to be negotiated independent of this PA. Additionally, if requested by an Affected Tribe, the Corps shall consult regarding the possibility of tribal access to historic properties that are sacred to the Affected Tribe and THPOs on Corps lands, in fulfillment of Executive Order 13007 and the Corps' EP 1165-2-1, section 3-2. Further, the Corps shall consult with Affected Tribes, THPOs, SHPOs, ACHP regarding the Corps' Tribal Partnership Program established pursuant to Section 203, Water Resources Development Act of 2000.

20. National Historic Preservation Act/Native American Graves Protection and Repatriation Act Overlap.

The Corps shall comply with Sections 106 and Section 101(d)(6) of the NHPA and the Native American Graves Protection and Repatriation Act (NAGPRA) in circumstances in which both authorities apply, such as the discovery of human remains that may be associated with a historic property. In addition to complying with NAGPRA, the Corps shall take steps to identify if human remains and other types of items meeting the definitions outlined in NAGPRA are associated with a property that may meet the National Register criteria and for which Section 106 and Section 101(d)(6) also apply. In such case, the Corps shall comply with the provisions of this PA and 36 CFR part 800, in addition to NAGPRA and any applicable NAGPRA Memoranda of Agreement (see Attachment 3).

21. Performance Standards and Qualifications.

A) Standards. The Corps shall ensure that all work required under this PA is carried out in accordance with the professional standards and guidelines outlined in the *Secretary of the Interior's Standards and Guidelines for Historic Preservation Projects* and applicable state and tribal authorities.

B) Qualifications. The Corps shall ensure that all work conducted pursuant to this PA is carried out by or under the supervision of persons meeting qualifications set forth in the *Secretary of the Interior's Professional Qualifications Standards*, as amended, for the pertinent discipline (see 48 F.R. 44739). The Corps acknowledges that Affected Tribes possess special knowledge and expertise regarding their tribal values, history, and culture, and properties that may possess traditional religious and cultural significance to them.

22. Annual Report.

The Corps shall prepare a report and distribute it to the Affected Tribes and THPOs, SHPOs, ACHP, and other consulting parties not less than 60 days prior to the date of the annual review. At a minimum, the report shall discuss the topics outlined in Attachment 4 for the past year and the coming year.

23. Semi-Annual Consultation Meetings and PA Annual Review.

A) Semi-Annual Consultation Meetings. The Corps shall host, at a minimum, semi-annual consultation meetings among the affected Tribes, THPOs, SHPOs, ACHP and other consulting parties to discuss the cultural resource program, Annual report, CRMPs and Action Plan status, activity prioritization, budget planning and other budget matters as necessary, PA implementation and the Corps' Section 106 responsibilities, and other topics of concern to the affected Tribes, THPOs, SHPOs, ACHP, and other consulting parties. The Corps, Affected Tribes, THPOs, SHPOs, ACHP, and other consulting parties together shall set the agenda for each meeting by the Corps distributing a call for agenda items at least 30 days prior to the meeting. It is anticipated that one meeting will be during the month of November and the other meeting will be held during the month of April. In order to address new budget issues, a review and planning for the budgetary process shall have priority at the April meeting. The Corps and these parties working together shall develop a schedule for the involvement of the Affected Tribes, THPOs, SHPOs, ACHP, and other consulting parties in the cultural resources activities for the coming year.

B) PA Annual Review. Annually, the Corps, Affected Tribes and THPOs, SHPOs, ACHP, and other consulting parties shall review this PA and progress in carrying out its provisions to determine whether the PA should be amended or terminated. Review of the PA shall occur at one of the semi-annual consultation meetings and be based, in part, on the annual report prepared by the Corps and submitted to parties not less than 60 days prior to the date of the review. Interim review of this PA may occur due to unsatisfactory performance, based on exercise of the dispute resolution clause, by the Corps or signatory party.

24. Funding and Budget Planning.

A) General. The Anti-Deficiency Act, 31 U.S.C. 1341, et seq., applies to this PA and must be followed by the Corps as it accomplishes the tasks that it has agreed to perform in this PA. This means that no action, plan, study, task, or the like shall be construed to require the Corps to obligate or expend funds in excess or in advance of an appropriation authorized by law. In addition, the Federal Acquisition Regulations (FAR) apply to the acquisition of goods and services by the Corps as a result of tasks or actions that must be performed pursuant to this PA.

B) Additional Funding. The Affected Tribes and THPOs, SHPOs, ACHP, and other consulting parties are encouraged to look for other potential funding sources to assist in the implementation of this program. Where applicable, they are encouraged to consider participating in the funding of cultural site preservation through the use of Corps cost sharing programs or other authorities. The Corps agrees that its intent is that all appropriated funds designated for carrying out this PA and attachment 3 will be spent for these purposes. Similarly, the Corps agrees that its intent is that the availability of non-Corps funds for cultural resource purposes will not result in a reduction of Corps appropriated funds for those same purposes.

C) Budget Planning. Annually, the Corps shall provide the Affected Tribes and THPOs, SHPOs, ACHP, and other consulting parties with a 60-day period to review and consult on the Corps' draft list of proposed projects for budget consideration to ensure that they are consistent with the Five-Year Plan and CRMPs and other considerations. Signatory parties may elect to enact a prioritization system.

25. Dispute Resolution.

A) Should a dispute or objection arise regarding any aspect of this agreement or an undertaking subject to review under this agreement, the Corps shall consult with the disputing or objecting party as soon as possible to try to resolve the objection. The disputing or objecting party and the Corps are encouraged to pursue alternative dispute resolution processes including traditional tribal approaches and to consult with the other affected Tribes, THPOs, SHPOs, ACHP and consulting parties.

B) If the disputing or objecting party believes that the consultation has failed to resolve the objection or dispute and wishes to pursue the issue, the party shall notify the Corps in writing within 60 days of the initial notification of the dispute. The Corps shall, within 30 days of the receipt of the disputing party notification, submit all relevant documentation pertaining to the dispute or objection with the Corps written proposal for its resolution to the ACHP with a copy to the disputing party.

C) Within 30 calendar days of receipt of such written submittal, the ACHP shall either:

- i) Notify the Corps that it shall consider the dispute pertinent to the applicable provisions of 36 CFR 800.7 (b) and respond in accordance with that subsection; or
- ii) Provide the Corps with recommendations, which the Corps shall take into account in reaching a final decision; or
- iii) Respond to the Corps that it will not consider the dispute or provide recommendations, in which case the Corps may proceed with the proposed resolution.

D) In the case of a ACHP response of (C)(ii) or (C)(iii), the Corps shall provide a decision to the objecting or disputing party that takes into account the ACHP's response

26. Additional Signatories.

The Corps will consult with the parties to this PA pursuant to stipulation 6 regarding parties who wish to be additional signatories. If the Corps approves the request to become an additional signatory, the party must be a state or Federal governmental agency or an affected tribe or THPO, must sign the Additional Signatory Form in Attachment 5 and submit it to the Omaha District, Army Corps of Engineers. In the annual report or sooner, the Corps shall inform the Affected Tribes, THPOs, SHPOs, ACHP and other consulting parties of additional parties who have signed the PA.

27. Amendments.

The Corps, Affected Tribe, THPO, ACHP, SHPO, or other consulting party to this PA may request that the PA be amended whereupon the parties will consult in accordance with stipulation 6 to consider such amendment(s). Any proposed amendment must be provided to the consulting parties as part of the agenda materials prior to the semi-annual meeting and must be discussed at that meeting. To implement an amendment, consensus among the signatories is required. The amendment must be executed by the signatories and in the same manner as this PA.

28. Withdrawal.

A) Any party to this PA may withdraw from the PA after first providing the other parties written notice that explains the reasons for withdrawal and providing them an opportunity to consult regarding amendment of the PA to prevent withdrawal.

B) In the case of withdrawal from this PA by an Affected Tribe with tribal lands (see definition for tribal lands in Attachment 2) within the scope of this PA or affected by the Corps' undertakings, the Corps shall comply with 36 CFR part 800, subpart B, for all undertakings on or affecting lands within the withdrawing tribe's tribal lands, in lieu of this PA. With respect to historic properties outside of the withdrawing tribe's tribal lands to which that tribe attaches religious and cultural significance, the Corps shall consult with the withdrawing tribe pursuant to 36 CFR part 800, subpart B, in lieu of this PA.

C) Withdrawal from this PA by a SHPO shall require the Corps to comply with 36 CFR part 800 with respect to all undertakings on or affecting lands within that SHPO's area of jurisdiction, in lieu of this PA.

29. Termination.

The Corps, Affected Tribe, THPO, ACHP, and SHPO, or other consulting party who believes that the PA should be terminated shall provide written notification with the reasons for termination to the Corps and other consulting parties at least 60 days prior to a semi-annual consultation meeting. The Corps shall provide this notification in the meeting materials provided to the parties. The parties shall consult to consider an amendment to the PA that would prevent termination. Termination of the PA shall be executed by the consensus of the signatories; or by the ACHP individually; or by a signatory SHPO for its area of jurisdiction; or a signatory Affected Tribe or THPO for its tribal lands within the scope of this PA. In such case, the Corps shall comply with 36 CFR part 800, subpart B, for all undertakings on or affecting lands within the terminating SHPO's area of jurisdiction or the terminating tribe's tribal lands. Termination of this PA in part or entirety will require the Corps to comply with 36 CFR part 800, subpart B with respect to each individual undertaking that would be reviewed under this PA.

30. Duration.

Unless this PA is terminated or amended in accordance with this PA, its duration is 40 years from date of the execution of this PA when it will become null and void.

Execution and implementation of this Programmatic Agreement evidences that the Corps has afforded the ACHP a reasonable opportunity to comment on the effects on historic properties related to the Corps undertakings within the scope of this PA.

SIGNATORIES

Final Programmatic Agreement
March 19, 2004

U.S. Army Corps of Engineers, Omaha District

By _____ Date _____
Title

U.S. Army Corps of Engineers, Northwest Division

By _____ Date _____
Title

U.S. Army Corps of Engineers, Headquarters, Washington DC

By _____ Date _____
Title

Advisory Council for Historic Preservation

By _____ Date _____
Title

Nebraska State Historical Society

By _____ Date _____
State Historic Preservation Officer

South Dakota State Preservation Office

By _____ Date _____
State Historic Preservation Officer

Montana State Historic Preservation Office

By _____ Date _____
State Historic Preservation Officer

North Dakota State Historic Preservation Office

By _____ Date _____
State Historic Preservation Officer

Cheyenne River Sioux Tribe Historic Preservation Office

By _____ Date _____
Tribal Historic Preservation Officer

Standing Rock Sioux Tribe Historic Preservation Office

By _____ Date _____
Tribal Historic Preservation Officer

SIGNATORIES

Final Programmatic Agreement
March 19, 2004

Turtle Mountain Band of Chippewa

By _____ Date _____
Tribal Historic Preservation Officer

Assiniboine & Sioux Tribes of Fort Peck

By _____ Date _____
Title

Blackfeet Tribe

By _____ Date _____
Title

Cheyenne River Sioux Tribe

By _____ Date _____
Title

Chippewa Cree Tribe

By _____ Date _____
Title

Crow Nation

By _____ Date _____
Title

Crow Creek Sioux Tribe

By _____ Date _____
Title

Flandreau Santee Sioux Tribe

By _____ Date _____
Title

Gros Ventre & Assiniboine Tribes

By _____ Date _____
Title

Lower Brule Sioux Tribe

By _____ Date _____
Title

SIGNATORIES

Final Programmatic Agreement
March 19, 2004

National Trust for Historic Preservation

By _____ Date _____
Title _____

Northern Arapaho Tribe

By _____ Date _____
Title _____

Northern Cheyenne Tribe

By _____ Date _____
Title _____

Oglala Sioux Tribe

By _____ Date _____
Title _____

Omaha Tribe of Nebraska

By _____ Date _____
Title _____

Ponca Tribe of Nebraska

By _____ Date _____
Title _____

Rosebud Sioux Tribe

By _____ Date _____
Title _____

Sac and Fox of Missouri in Kansas and Nebraska

By _____ Date _____
Title _____

Santee Sioux Tribe of Nebraska

By _____ Date _____
Title _____

Sisseton-Wahpeton Sioux Tribe

By _____ Date _____
Title _____

SIGNATORIES

Final Programmatic Agreement
March 19, 2004

Spirit Lake Sioux Tribe

By _____ Date _____
Title

South Dakota Department of Game, Fish and Parks

By _____ Date _____
Title

Standing Rock Sioux Tribe

By _____ Date _____
Title

Three Affiliated Tribes

By _____ Date _____
Title

Turtle Mountain Band of Chippewa

By _____ Date _____
Title

Winnebago Tribe of Nebraska

By _____ Date _____
Title

Yankton Sioux Tribe

By _____ Date _____
Title

SIGNATORIES

Final Programmatic Agreement
March 19, 2004

Bureau of Indian Affairs, Great Plains Region

By _____ Date _____
Title

Eastern Shoshone Tribe

By _____ Date _____
Title

AUTHORITY AND TRUST RESPONSIBILITY**AUTHORITY**

The primary purpose and legal authority for this PA are found in the National Historic Preservation Act (16 U.S.C. §470f et seq) (NHPA), particularly section 106 (16 U.S.C. 470f), section 110 (16 U.S.C. 470h-2), and section 101 (16 U.S.C. 470a) of that Act. Federal agency compliance with NHPA section 106 is governed by regulations issued by the Advisory Council on Historic Preservation, 36 C.F.R. part 800, and this PA has been negotiated pursuant to those regulations. The signatories agree that the Missouri River Main Stem System shall be administered in accordance with the stipulations in this PA to take into account and attempt to mitigate adverse effects to historic properties and satisfy the responsibilities of the Corps pursuant to section 106.

In addition to section 106 and the Advisory Council's regulations, numerous other provisions of the NHPA, some of which are cited in the PA, are applicable to activities of the Corps in fulfilling its commitments under this PA. Additionally, the Corps is responsible for complying with other legal authorities, including federal statutes, regulations, executive orders, and guidance documents, as well as any applicable tribal and state laws. Citations to some of these other sources of law are provided here for reference purposes only. In the final section of this attachment, a discussion of the Federal trust responsibilities to Indian Tribes is provided.

1. Federal Laws

American Indian Religious Freedom Act (AIRFA), Pub. L. No. 95-341 (codified in part at 42 U.S.C. §1996).

Native American Graves Protection and Repatriation Act (NAGPRA), 18 U.S.C. §1170, 25 U.S.C. §3001 – 3013, implemented through regulations codified at 43 C.F.R. part 10.

Archeological Resources Protection Act, 16 U.S.C.470aa – 470mm, implemented through uniform regulations (identical except for numerical designations) codified at 18 C.F.R. part 1312 (Tennessee Valley Authority), 32 C.F.R. part 229 (Defense), 36 C.F.R. part 296 (Agriculture), 43 C.F.R. part 7 (Interior); with respect to Indian lands, see also Interior supplemental regulations, 43 C.F.R. part 7, subpart B, and Bureau of Indian Affairs supplemental regulations, 25 C.F.R. part 262.

National Environmental Policy Act (NEPA), 42 U.S.C. 4321 – 4347, implemented through regulations issued by the Council on Environmental Quality codified at 40 C.F.R. parts 1500 – 1508.

Indian Self-Determination Act, 25 U.S.C. §§450 – 450n, 455 – 458e.

2. Tribal Laws

Applicable Tribal Laws and Permits

3. State Laws

Applicable State Laws and Permits

4. Executive Orders

- EO 11593 Protection and Enhancement of the Cultural Environment
- EO 12898 Federal Actions to Address Environmental Justice in Minority Populations And Low-Income Populations
- EO 13006 Locating Federal Facilities on Historic Properties
- EO 13007 Protection of Indian Sacred Sites
- EO 13175 Consultation and Coordination with Indian Tribal Governments
- EO 13287 Preserve America

5. Policy

Concerning Distribution of Eagle Feathers for Native American Religious Purposes

Department of Defense, American Indian and Alaska Native Policy, 1998

Northwest Division, US ACE, Native American Desk Guide, September. 30, 2002

Guidance Letter #57, Indian Sovereignty and Government-to-Government Relations with Indian Tribes

Guide on Consultation and Collaboration with Indian Tribal Governments and the Public Participation of Indigenous Groups and Tribal Members in Environmental Decision Making, prepared by the National Environmental Justice Advisory Council, Indigenous Peoples Subcommittee, a Federal Advisory Group of the EPA

6. Federal Guidelines

Relationship Between Executive Order 13007 Regarding Indian Sacred Sites and Section 106. Advisory Council on Historic Preservation Memo, updated April 4, 2003

Secretary of Interior's Standards and Guidelines for Archeology and Historic Preservation Projects.

Guidelines for Evaluating and Documenting Traditional Cultural Properties, National Register Bulletin 38. U.S. Department of Interior, National Park Service, Interagency Resources Division.

How to Evaluate and Nominate Designed Historic Landscapes. National Register Bulletin 18. U.S. Department of Interior, National Park Service, Interagency Resources Division.

7. Department of Defense and/or USACE Regulations and Guidelines

- ER 405-1-12 Real Estate Handbook
- ER 1105-2-1 Environmental Compliance Program at Corps Projects and Activities

ER 1130-2-433 and Historical	Collections Management and Curation of Archeological Data
ER 1130-2-438 Preservation Program	Project Construction and Operation Historic
ER and EP 1130-2-540	Cultural Resource Management – Project Operations: Environmental Stewardship Operations and Maintenance Guidance and Procedures
EP 1165-2-1	Digest of Water Policies and Authorities, section 3-12 on E.O. 13007

7. Memoranda Of Agreement

Between the Lower Brule Sioux Tribe, Bureau of Indian Affairs Agency; the Crow Creek Sioux Tribe Bureau of Indian Affairs Agency; and the Omaha District, U.S. Army Corps of Engineers concerning enforcement of federal preservation laws at Big Bend Dam, dated 4 June 2003;

Between the Turtle Mountain Band of Chippewa, the Standing Rock Sioux Tribe, the Spirit Lake Sioux Tribe and the Three Affiliated Tribes, concerning treatment and disposition of unmarked burials associated with these Tribes on Omaha District Corps lands, dated 13 December 1993.

9. Cultural Resources Memorandum

November 2002 Message from the Commander, General David Fastabend, Commander of the Northwest Division, in which he discusses Corps responsibilities to Cultural Resources.

10. Trust Responsibility to Indian Tribes

The ACHP recognizes their trust responsibilities to federally recognized Tribes with regard to this PA. The ACHP's trust relationship with Indian Tribes is described in its ACHP Policy Statement Regarding ACHP's Relationship with Indian Tribes, issued November 17, 2000 and updated on April 4, 2003.

** This background information about the federal trust responsibility to Indian Tribes was prepared by tribal attorneys for the educational benefit and convenience of any reader. It was not intended to reflect the views of the U.S. Army, Corps of Engineers and possibly, the consulting parties.*

The Army Corps of Engineers recognizes their trust responsibilities to federally recognized Tribes with regard to this PA.

The trust responsibility is a federal common law and other legal doctrine, the subject of numerous decisions by Federal courts interpreting treaties, statutes, regulation, and executive orders. As described in a 1977 report commission by Congress:

“The purpose of the trust doctrine is and always has been to ensure the survival and welfare of Indian Tribes and people. This includes an obligation to provide for those services required to protect and enhance Indian lands, resources, and self-government, and also includes those economic and social programs which are necessary to raise the

standard of living and social well-being of the Indian people to a level comparable to the non-Indian society.”²

The Federal trust responsibility to Indian Tribes has its roots in land cessions made by Tribes in treaties, in the promises made by the United States to protect the rights of the Tribes to govern themselves in the lands that they had reserved, and in the practice of the federal government holding legal title to most Indian land, subject to Indian rights of occupancy and beneficial use.³ In the present day sense, the trust responsibility can be described as “the federal government’s duty to protect this separatism [of the Tribes] by protecting tribal lands, resources, and the native way of life.”⁴ Congress has explicitly acknowledged that “the United States has a trust responsibility to each tribal government that includes the protection of the sovereignty of each tribal government.”⁵ The trust doctrine includes fiduciary obligations comparable to those of a trustee for the management of trust land and natural resources and funds derived from trust land, including the duty to act “with good faith and utter loyalty to the best interests” of the Indians.⁶ The Federal government has been held liable for mismanagement in some cases.⁷ The Supreme Court has acknowledged “the undisputed existence of a general trust relationship between the United States and the Indian people,”⁸ although for the Federal government to be liable in damages for breach of trust, the Court has held that fiduciary duties must be based on a relevant statute or regulation, or a network of statutes and regulations.

In several lower Federal court decisions, the trust doctrine has been said to extend to Federal agencies other than the agency charged with management of trust land, resources, and funds (i.e., generally the Bureau of Indian Affairs carrying out the authority of the Secretary of the Interior),⁹ Regardless of whether the trust doctrine might

² AMERICAN INDIAN POLICY REVIEW COMMISSION, FINAL REPORT, at 130 (1977) (herein “AIPRC Final Report”), quoted in STEVEN PEVAR, THE RIGHTS OF INDIANS AND TRIBES at 27 (2d ed., 1992).

³ See generally Mary Christina Wood, *Indian Land and the Promise of Native Sovereignty: The Trust Doctrine Revisited*, 1994 UTAH L. REV. 1471 (1994) [hereinafter “Wood, Trust I”]; Mary Christina Wood, *Protecting the Attributes of Native Sovereignty: A New Trust Paradigm for Federal Actions Affecting Tribal Lands and Resources*, 1995 UTAH L. REV. 109 (1995) [hereinafter “Wood, Trust II”]. See also FELIX S. COHEN, HANDBOOK OF FEDERAL INDIAN LAW 220-28 (1982 ed.).

⁴ Wood, Trust I, at 1496.

⁵ 25 U.S.C. §3601.

⁶ AIPRC Final Report, *supra* note 1, at 128, quoted in Pevar, *supra* note 1, at 27.

⁷ E.g., *United States v. Mitchell*, 463 U.S. 206 (1983) (liability in money damages for mismanagement of timber resources by the Department of Interior) (often referred to as “Mitchell II” to distinguish this decision from *United States v. Mitchell*, 445 U.S. 535 (1980) (“Mitchell I”), in which the Federal government was not held liable); See also *United States v. White Mountain Apache Tribe*, 537 U.S. 465 (2003) (holding that the Court of Federal Claims has jurisdiction over a breach of trust claim arising out of mismanagement of land and buildings held in trust for tribe but occupied by federal government); *contra* *United States v. Navajo Nation*, 537 U.S. 488 (2003) (holding federal government not liable in damages for alleged breach of trust in leasing of land for mineral extraction).

⁸ *Mitchell II*, 463 U.S. at 225.

⁹ E.g., *Nance v. Environmental Protection Agency*, 645 F.2d 701, 710 (9th Cir. 1981) (EPA held to have a fiduciary duty to consider impacts of Northern Cheyenne Tribe’s designation of its reservation as Class I for air quality purposes on Crow Tribe’s ability to mine coal on its reservation, and finding duty fulfilled); *Pyramid Lake Paiute Tribe of Indians v. U.S. Dep’t of the Navy*, 898 F.2d 1410, 1420 (9th Cir. 1990) (trust obligation to consider impacts on tribal water rights recognized but held to be satisfied through conservation measures); *Morongo Band of Mission Indians v. Federal Aviation Administration*, 161 F.3d 569, 573-74 (9th Cir. 1998) (discussing distinction between general and specific trust responsibility and hold that general responsibility “is discharged through the agency’s compliance with general regulations and statutes not specifically aimed at protecting Indian tribes”); *contra* (*North Slope Borough v. Andrus*, 642 F.2d 589, 611 (1980) (a post-*Mitchell I* and pre-*Mitchell II* decision finding no trust

give rise to judicially enforceable claims, the Tribes expect the Corps to act in accordance with the Federal trust responsibility. This includes government-to-government consultation whenever the Corps' "plans or actions affect trust resources, trust assets, or tribal health and safety."¹⁰

Some Corps actions directly or indirectly affect trust land, and some of the lands managed by the Corps are within reservation boundaries established by treaties where the Tribes and their members continue to have treaty-based rights even though lands have been taken out of trust status. Federal lands managed by the Corps (both within and outside reservation boundaries) include places that hold religious and cultural importance of the Tribes, and some of these places are crucial for the cultural identities of the Tribes and, as such, for the survival of the Tribes as distinct peoples. Some of these places contain the graves of ancestors and funerary objects, in which Federal law recognizes the right of lineal descendants and culturally affiliated Tribes to take custody in the event that they are removed from the Earth. The Tribes expect the Corps to treat these sacred and cultural significant places as subject to the Federal trust responsibility.

This means that they must be engaged in consultation before decisions are made and that the Tribes expect to participate in making decisions and in carrying out decisions. Consultation will be both specific to individual Tribes and with as many comprehensive consultations attended by all affected Tribes, THPOs, SHPOs, ACHP as are necessary with real efforts to reach consensus. Consultations will be conducted in a positive manner, on a government-to-government basis, honoring all treaties and the trust doctrine and other law, which entails a fiduciary and fiscal responsibility of the Corps. Decisions will be made on a government-to-government basis. Finally, the Corps will continue to include, as consulting parties, affected Tribes, THPOs, SHPOs, ACHP in any review or update of the Master Manual.

responsibility in the absence of specific statutory provisions). See Wood, Trust I, *supra* note 2, at 1527-1535, Wood, Trust II at 117-21, *supra* note 2.

¹⁰ The quoted language is from the Department of the Interior's Departmental Manual (DM) and applies to all bureaus and offices within DOI. 516 DM 2.2. While the DM does not apply to the Corps, the Tribes believe that the basic principle does apply to the Corps.

ACRONYMS AND DEFINITIONS

ACRONYMS

ACHP – Advisory Council on Historic Preservation
APE – Area of Potential Effects
ARPA – Archaeological Resources Protection Act
CRMP – Cultural Resources Management Plan
NAGPRA – Native American Graves Protection and Repatriation Act
NHPA- National Historic Preservation Act
SDGFP-South Dakota Department of Game, Fish, and Parks
SHPO – State Historic Preservation Officer
THPO – Tribal Historic Preservation Officer

DEFINITIONS

Adverse Effect – “an effect of an undertaking that may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property’s location, design, setting, materials, workmanship, feeling, or association.” 36 C.F.R. §800.5(a). This section of the ACHP regulations provides additional guidance on how to determine whether an effect is adverse and examples of adverse effects.

Advisory Council on Historic Preservation (ACHP) – an independent agency created by the Title II of the National Historic Preservation Act (NHPA), 16 U.S.C. §§470i through 470v. The ACHP issued regulations, 36 C.F.R. part 800, governing the section 106 review process and oversees the conduct of the Section 106 process (see section 106, 16 U.S.C. §470f, and section 211, 16 U.S.C. §470s.)

Affected Tribe – Any Indian Tribe, as defined in this Attachment, that attaches religious and cultural significance to cultural resources, including historic properties, as provided in the scope of this PA, regardless of the location or nature of the undertaking, or regardless of whether the Tribe has been or will be developing any other agreements. Any Tribe that is included in the signatory portion of this PA, whether or not such tribe has signed this PA, and any other Tribe that becomes an “additional signatory” pursuant to Stipulation 26.

Archaeological Resource – “any material remains of past human life or activities which are of archaeological interest,” and that are at least 100 years of age, including graves and human remains if found in an archaeological context, as defined in the Archaeological Resources Protection Act (ARPA), 16 U.S.C. §470bb. The uniform regulations provide extensive elaboration on the definition, including the key phrase “of archaeological interest.” 43 C.F.R. §7.3(a); 32 C.F.R. §229.3(a). The phrase “of archaeological interest” is defined in regulations as “capable of providing scientific or humanistic understandings of past human behavior, cultural adaptation, and related topics through the application of scientific or scholarly techniques such as controlled observations, contextual measurement, controlled collection, analysis, interpretation and explanation.” The statutory definition explicitly includes graves and human remains, which are also the subject matter of the Native American Graves Protection and Repatriation Act (NAGPRA); funerary objects, sacred objects, and objects of cultural patrimony covered

by NAGPRA may be archaeological resources if at least 100 years of age and found in an archaeological context. An archaeological resource may be a historic property, or located within a historic property, as that term is used in the National Historic Preservation Act (NHPA) and this PA. A site at which archaeological resources are located may also be an Indian sacred site as defined in Executive Order 13007.

Area of Potential Effects – “the geographic area or areas within which an undertaking may directly or indirectly cause alternations in the character or use of historic properties, if any such properties exist. The area of potential effects is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking.” 36 C.F.R. §800.16(d).

ARPA Permitting Process – permit process for the excavation or removal of archaeological resources from federal public lands and Indian lands, established pursuant to ARPA and conducted pursuant to uniform regulations codified at 43 C.F.R. part 7; 32 C.F.R. part 229. For “Indian lands” see also supplemental regulations issued by Department of Interior 43 C.F.R part 7, subpart B (§§7.31 – 37) and supplemental regulations issued by Bureau of Indian Affairs, 25 C.F.R. part 262.

Consensus – For purposes of this PA, consensus means either that all of the signatories agree or that none of the signatories objects.

Consultation – “the process of seeking, discussing, and considering the views of other participants, and, where feasible, seeking agreement with them regarding matters arising in the section 106 process. The Secretary’s ‘Standards and Guidelines for Federal Agency Preservation Programs pursuant to the National Historic Preservation Act’ provide further guidance on consultation.” 36 C.F.R. §800.16(f). The stipulations in this PA provide detail on how consultation will be conducted for purposes of compliance with this PA. Consultation in other contexts may be conducted somewhat differently than as provided for in this PA, and may be subject to the requirements of other statutes, regulations and other sources of law, including those listed in Attachment 2.

Consulting Parties – with the exception of the Corps, all officials and entities named in the “Signatures” section of this PA whether or not they have signed the PA and all additional signatories pursuant to Stipulation 26. Those consulting parties whom are signatories to this agreement shall be consulted and treated as outlined in this PA. Those consulting parties that have not signed will be consulted following the Secretary’s “Standards and Guidelines for Federal Agency Preservation Programs Pursuant to the National Historic Preservation Act” 36 C.F.R. §800.16(f).

Cultural Resource(s) – a general “term of art” without a specific legal definition used to refer to “all elements of the physical and social environment that are thought to have cultural value.” Thomas F. King, *Places That Count: Traditional Cultural Properties in Cultural Resources Management* (Alta Mira Press, 2003), p. 11. For purposes of this PA, cultural resources include historic properties, archaeological resources, sacred sites, religious sites, burial sites, properties of traditional religious and cultural importance, and Native American cultural items (including human remains, associated funerary objects, unassociated funerary objects, sacred objects, and objects of cultural patrimony). A cultural resource site is the location of a cultural resource.

Cultural Resource Management – activities and tasks involved in the stewardship of cultural resources, including to identify, evaluate, maintain, protect, and otherwise treat

cultural resources, and to comply with historic preservation and environmental law (including the NHPA, ARPA, AIRFA, NEPA, EO 13007, EO 13287). These activities and tasks are described in detail in many sources, including federal laws, regulations, and guidance and the “Secretary of the Interior’s Standards and Guidelines for Historic Preservation Projects,” (48 Fed. Reg. 44716) and the many publications of the National Park Service. U.S. Army Corps Engineering Regulation and Pamphlet 1130-2-540 discuss cultural resources stewardship and cultural resources management.

CRMP – cultural resources management plan. See stipulation 9 of the PA.

Effect – “alteration to the characteristics of a historic property qualifying it for inclusion in or eligibility for the National Register.” 36 C.F.R. §800.16(i).

Eligible for Inclusion in the National Register – “includes both properties formally determined to be as such in accordance with regulations of the Secretary of the Interior and all other properties that meet the National Register criteria.” 36 C.F.R. §800.16(l)(2). Criteria of eligibility are codified at 36 C.F.R. §60.6. Regulations of the Secretary of the Interior for determinations of eligibility are codified at 36 C.F.R. part 63. Determinations of eligibility may also be made during the section 106 process. 36 C.F.R. §800.4.

Federal Acquisition Regulations – the regulations governing procurement by federal agencies, codified at 48 C.F.R. Part 1.

Federal Lands – In NAGPRA, the term “Federal lands” is defined as any “lands other than tribal lands which are controlled or owned by the United States, including lands selected by but not yet conveyed to Alaska Native corporations and groups organized pursuant to the Alaska Native Claims Settlement Act.” 25 U.S.C. §3001(5). The substance of this definition closely corresponds to the definition of the term “public lands” as used in ARPA. “Federal lands” that are within the boundaries of an Indian reservation are also “tribal lands” for purposes of NHPA and NAGPRA. [Note: Individual Indian allotments that are outside the boundaries of an Indian reservation and not otherwise within a “dependent Indian community” are considered “federal lands” for purposes of NAGPRA. 60 Fed. Reg. 62140 (1995).]

Final Agency Action – an agency action that is not subject to review within the agency and, as such, may be subject to judicial review in federal court pursuant to the Administrative Procedure Act. 5 U.S.C. §§551, 701 – 706, or other federal statute.

Historic Property – “any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization and that meet the National Register criteria.” 36 C.F.R. §800.16(l)(1), providing elaboration on the statutory definition codified at 16 U.S.C. §470(w)(5). See also definitions of “eligible for inclusion in the National Register” and “National Register Criteria” in this Attachment.

Historic Resource – is a statutory synonym of “historic property.” 16 U.S.C. §470w(5).

Impacts - any change to a cultural resource site, including a historic property

Indian Land – as defined in the Archaeological Resources Protection Act (ARPA), “lands of Indian Tribes, or Indian individuals, which are either held in trust by the United States or subject to a restriction on alienation imposed by the United States, except for any subsurface interests in lands not owned or controlled by an Indian tribe or an Indian individual.” 16 U.S.C. §470bb(4). This term is not synonymous with “tribal lands” as defined in NHPA and NAGPRA.

Indian Sacred Sites – as used in Executive Order 13007, “any specific, discrete, narrowly delineated location on Federal land that is identified by an Indian tribe, or an Indian individual determined to be an appropriately authoritative representative of an Indian religion, as sacred by virtue of its established religious significance to, or ceremonial use by, an Indian religion, provided that the tribe or appropriately authoritative representative of an Indian religion has informed the agency of the existence of such a site.” Executive Order 13007 (May 24, 1996) (published in notes following 42 U.S.C. §1996). [Note: The definition in EO 13007 is considerably more narrow than the way in which this term is commonly used by Tribes and individual Indians.]

Indian Tribe or Tribe – “an Indian tribe, band, nation, or other organized group or community, including a Native village, Regional corporation or Village Corporation, as those terms are defined in section 3 of the Alaska Native Claims Settlement Act (43 U.S.C. 1602), which is recognized as eligible for the special programs and services provided by the United States to Indians because of their status as Indians.” 16 U.S.C. §470w(4).

Main Stem – the series of dams and reservoirs along the upper Missouri River. For the purposes of this PA those dams and reservoirs are Gavins Point Dam/Lewis and Clark Lake, Fort Randall Dam/Lake Francis Case, Big Bend Dam/Lake Sharpe, Oahe Dam/Lake Oahe, Garrison Dam/Lake Sakakawea, and Fort Peck Dam/Fort Peck Lake.

National Register – the National Register of Historic Places maintained by the National Park Service through the authority of the Secretary of the Interior.

National Register Criteria – the criteria of eligibility for the National Register established in regulations issued by the Secretary of the Interior. 36 C.F.R. §60.6.

Project Lands – land owned by the U.S. Army Corps of Engineers, Omaha District that are associated with the dams and reservoirs on the upper Missouri River. For the purposes of this PA those dams and reservoirs are Gavins Point Dam/Lewis and Clark Lake, Fort Randall Dam/Lake Francis Case, Big Bend Dam/Lake Sharpe, Oahe Dam/Lake Oahe, Garrison Dam/Lake Sakakawea, and Fort Peck Dam/Fort Peck Lake.

Section 106 – section 106 of the National Historic Preservation Act (NHPA), 16 U.S.C. §470f, as implemented through regulations issued by the ACHP, 36 C.F.R. part 800.

Shared Stewardship – pre-decisional consultation with Affected Tribes, THPOs, SHPOs, ACHP and other consulting parties, especially with any Affected Tribe concerning an undertaking that may affect any sacred or cultural resources associated with such a tribe. Any Affected Tribe that attaches religious or cultural importance to a historic resource that is the subject of consultation will have an equal role with the Corps in determining the appropriate treatment and management of the resource.

Signatories – all the parties that have signed this PA, including any that may be added as additional signatories pursuant to stipulation 26.

State Historic Preservation Officer (SHPO) – “the official appointed or designated pursuant to section 101(b)(1) of the [NHPA] to administer the State historic preservation program or a representative designated to act for the State historic preservation officer.” 36 C.F.R. §800.16(v).

Traditional Cultural Property -- a property that is “eligible for inclusion in the National Register because of its association with cultural practices or beliefs of a living community that (a) are rooted in that community’s history, and (b) are important in maintaining the continuing cultural identity of the community.” National Park Service, National Register Bulletin 38, Guidelines for Evaluating and Documenting Traditional Cultural Properties (1990), available at www.cr.nps.gov/nr/publications/bulletins/nrb38/htm.

Treatment Plan – Information describing a historic property and how it is proposed to be treated. Rehabilitation, stabilization (including rripping, revegetation, recontouring of areas surrounding the property, etc.), maintenance, and archaeological excavation are possible treatments.

Tribal Historic Preservation Officer (THPO) – “the tribal official appointed by the tribe’s chief governing authority or designated by a tribal ordinance or preservation program who has assumed the responsibilities of the SHPO [State Historic Preservation Officer] for purposes of section 106 compliance in tribal lands in accordance with section 101(d)(2) of the act.” 36 C.F.R. §800.16(w). [Note: See section 101(d)(2), National Historic Preservation Act, 16 U.S.C. §470a(d)(2).]

Tribal Lands – as defined in the National Historic Preservation Act, “(A) all lands within the exterior boundaries of any Indian reservation; and (B) all dependent Indian communities. 16 U.S.C. §470w(14). Within the scope of this PA, the NHPA definition is identical to the Native American Graves Protection and Repatriation Act (NAGPRA) definition, 25 U.S.C. §3001(15). [Note: “Tribal lands” for purposes of NHPA and NAGPRA is not synonymous with “Indian lands” for purposes of ARPA. Federal lands, including lands administered by the Corps, as well as lands owned by state and local governments and private persons, within reservation boundaries of Indian Tribes are “tribal lands” for purposes of NHPA and NAGPRA. For the purposes of this PA, the service area of the Santee Sioux Tribe of Nebraska shall be considered “tribal lands”.]

Undertaking – “a project, activity, or program funded in whole or in part under the direct or indirect jurisdiction of a Federal agency, including those carried out with Federal financial assistance; those requiring a Federal permit, license or approval...” 36 C.F.R. §800.16(y). [Note: The regulatory definition includes one more clause: “and those subject to State or local regulation administered pursuant to a delegation or approval by a Federal agency.” This clause was the subject of a federal court decision in 2003, and the ACHP has issued a proposed revision to that clause of the regulatory definition. 68 Fed. Reg. 55354 (Sept. 25, 2003).]

The Corps agrees to complete the following with all Affected Tribes: Memoranda of Agreement among the Omaha District, Army Corps of Engineers and Affected Tribes Regarding NAGPRA, ARPA, Paleontological Resources, and Other Items that are Commitments Outside of the Missouri River Main Stem System Programmatic Agreement utilizing but not limited to the following outline:

Should a disagreement occur between the parties that have entered into these requirements the processes under each of these laws shall be used to resolve those disagreements.

Outline:

1. Native American Graves Protection and Repatriation Act (NAGPRA)

a) Inadvertent discoveries of human remains, artifacts, and funerary objects. The Corps will follow the terms of the Native American Graves Protection and Repatriation Act regulations (NAGPRA), 43 CFR 10 et seq and applicable Memoranda of Agreement (MOA) with Tribes.

b) Memorandum of Agreement, North Dakota Intertribal Reinterment Committee. The Corps will follow the provisions as detailed in the North Dakota Intertribal Reinterment Committee (NDIRC) Memorandum of Agreement. This would apply for all those Tribes that have signed the NDIRC MOA. There is a clause in the NDIRC MOA that allows for other Tribes to join the agreement.

c) Memorandum of Agreement, Non-NDIRC Tribes. The Corps will develop a MOA to implement the provisions of the Native American Graves Protection and Repatriation Act (NAGPRA) with those Tribes that have not signed the NDIRC MOA. A draft NAGPRA MOA shall be developed collaboratively with the affected Tribes, THPOs, SHPOs, ACHP, within 2 years of signing of this programmatic agreement. A final NAGPRA MOA shall be completed within 180 days from receipt of comments on the Draft NAGPRA MOA.

d) The Corps will ensure that resources meeting NAGPRA definitions are handled according to the requirements and procedures listed in the NAGPRA regulations or other memoranda of agreement entered into by the Corps and tribal governments. Continued progress will be made on the repatriation of artifacts under the Corps control and protection and located in a museum or curation facility in which the Corps has an active agreement or contractual obligation.

2. Archeological Resources Protection Act.

a) ARPA Permits. Prior to a decision about issuance of an ARPA permit, the Corps will provide copies of the ARPA permit application to affected Tribes, THPOs, SHPOs, ACHP and other consulting parties for review and comment. The Corps will take these comments into account in making a decision about issuance of the permit.

3. Paleontology Resources

a) The Corps will curate paleontology resources in the same manner as archeological collections. Agreements with curation facilities will be formatted according to the example given in 36 CFR Part 79.1.

4. Federal Undertakings and actions on lands outside the scope of this PA

a) In consultation with the Affected Tribes, the Corps, will review its protocols and procedures regarding Corps actions, past and present, beyond the scope of this PA to ensure tribal consultation consistent with Federal laws, Executive Orders, and other legal authorities.

ANNUAL REPORTS

Annually, the Corps shall prepare a report that includes discussion of the following topics both for the past year and as anticipated or planned for the coming year:

- 1) List of all undertakings within the project area;
- 2) Description of all surveys and activities undertaken to identify and evaluate historic properties and results of such efforts;
- 3) Description of all historic properties affected or potentially affected by Corps undertakings;
- 4) Description of measures to avoid, minimize, or mitigate effects to historic properties, including Treatment Plans;
- 5) Status of Five-Year Plan, assessment of progress in meeting its goals, and suggestions for revision;
- 6) Status of CRMPs and assessment of progress in fulfilling recommendations;
- 7) Status of the enforcement program and assessment of its effectiveness;
- 8) Status of site monitoring program and assessment of progress in meeting its goals;
- 9) Status of public education and interpretive activities;
- 10) Status of cultural resources program budget, including funding problems;
- 11) Additional signatories to the PA; notifications to amend, withdraw from, or terminate the PA;
- 12) General assessment of how well the PA is working; and
- 13) Any other facts the Corps considers pertinent to evaluation of the activities covered by the PA and any available information that the affected Tribes, THPOs, SHPOs, ACHP and other consulting parties may have requested that the Corps incorporate into the report.